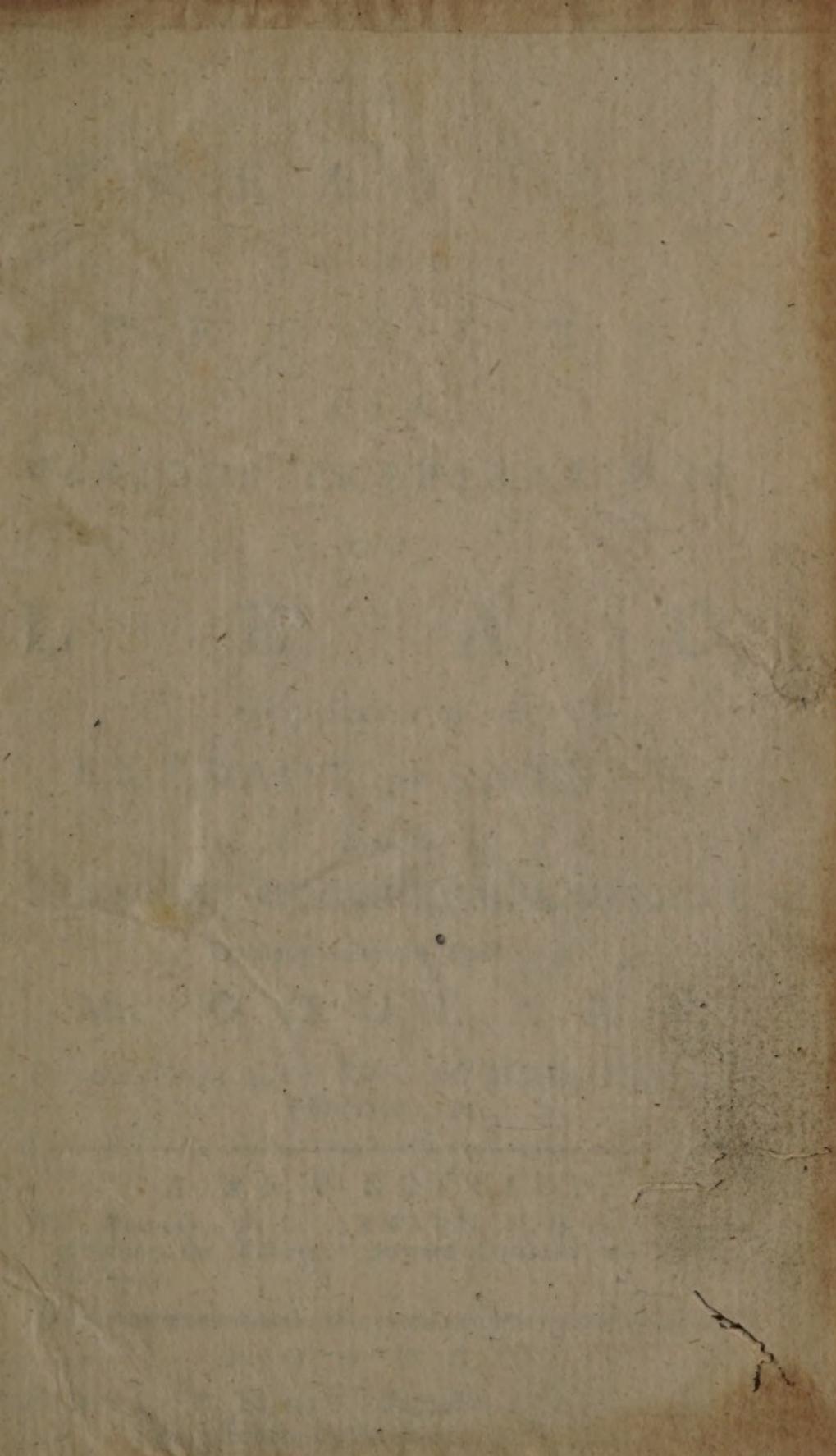


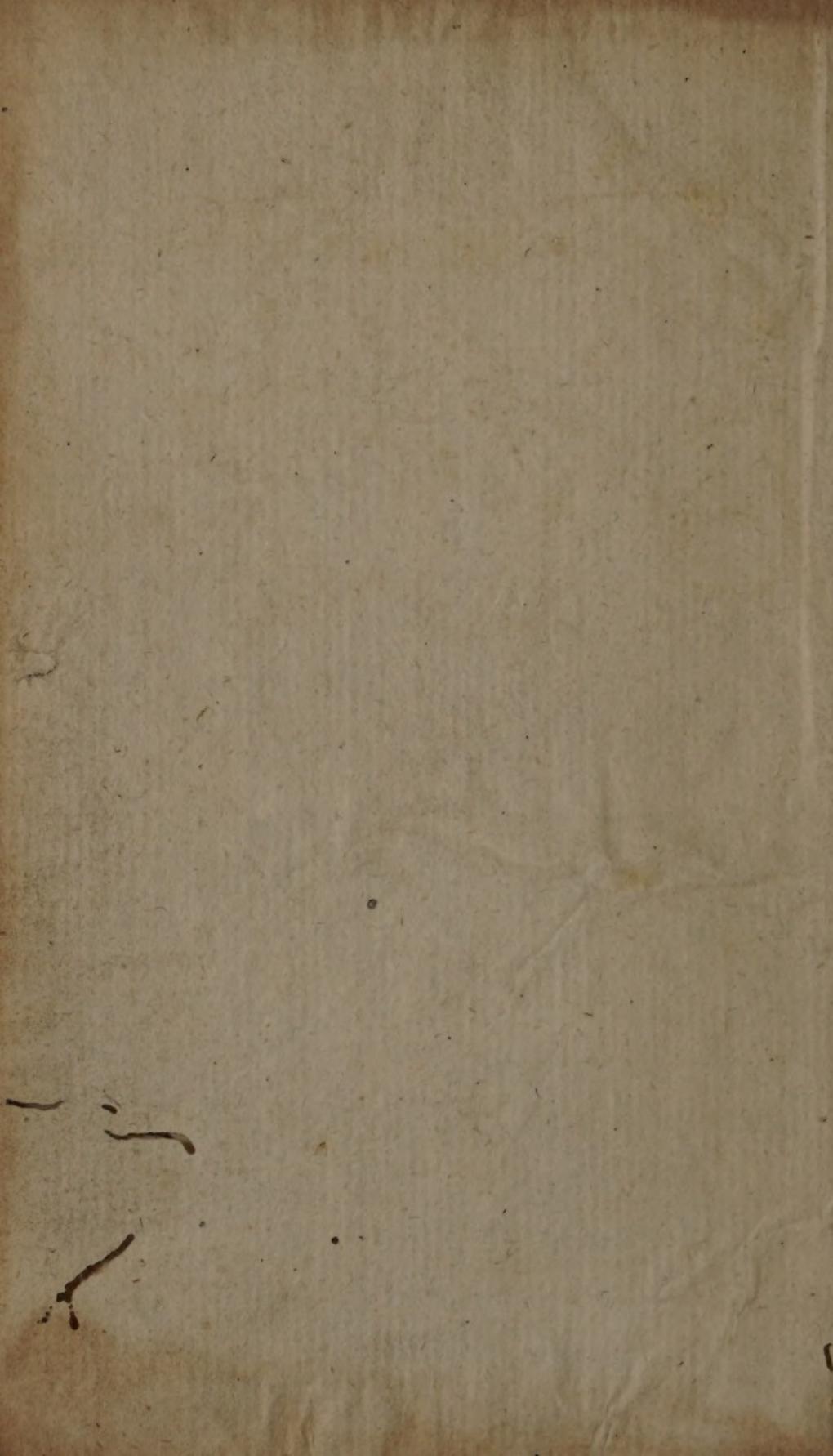
9



25,185/A/2







A
T R E A T I S E
O N T H E
E F F E C T S
A N D
V A R I O U S P R E P A R A T I O N S
O F
L E A D,

P A R T I C U L A R L Y O F T H E
E X T R A C T O F S A T U R N,
F O R
D I F F E R E N T C H I R U R G I C A L D I S O R D E R S.

Translated from the FRENCH of

M r . G O U L A R D,

S u r g e o n - M a j o r t o t h e R o y a l a n d M i l i t a r y H o s p i t a l a t
M O N T P E L L I E R.

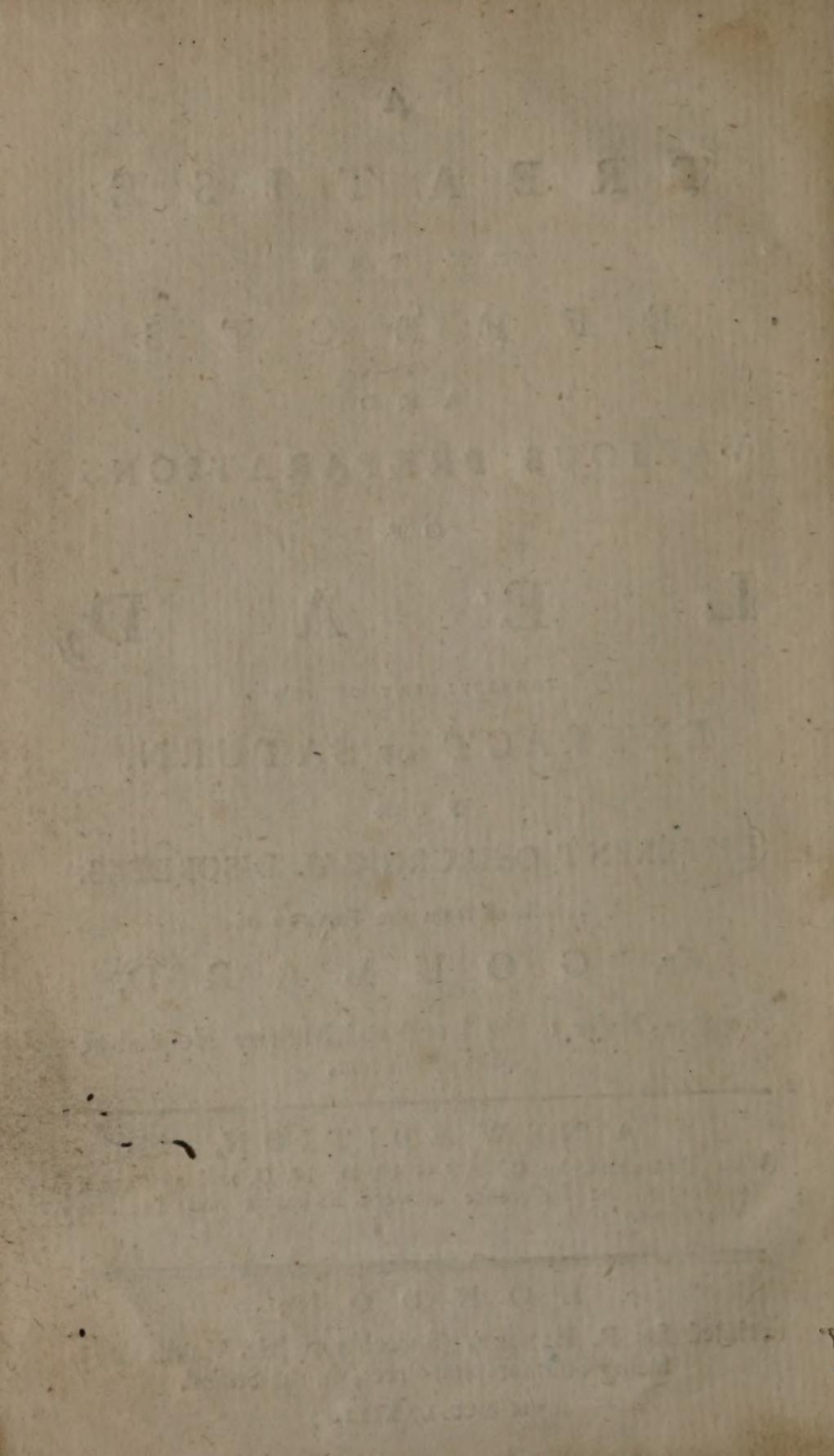
A N E W E D I T I O N,

W i t h R E M A R K S, b y G. A R N A U D, M. D. a n d a T A B L E
e x h i b i t i n g t h e D i f f e r e n c e b e t w e e n E N G L I S H a n d F R E N C H
W E I G H T S.

L O N D O N :

P r i n t e d f o r P. E L M S L Y, (S u c c e s s o r t o M r. V A I L L A N T)
f a c i n g S o u t h a m p t o n - s t r e e t, i n t h e S t r a n d.

M D C C L X X I I I .



TO THE
READER.

AS the Translator of the following Treatise had no other view in offering it to the Public, but to be of some use to his Countrymen, he is willing to refer the merits of his performance to the judgment of the impartial reader. Not being of the Faculty, and unacquainted with the terms and processes of art, he is very sensible that some inaccuracies may have crept into minute descriptions of diseases, their symptoms, and cure. But the applause and admiration with which the original was read in France, for whose benefit, and in whose language it was first published, and the success which attends the proper use of the remedies it recommends

To the R E A D E R.

made him think that a translation of it would be an acceptable present to the English reader, if the general meaning of the author could be rendered into our language. The success of the Translator's endeavours to gain this essential point, will answer every purpose he had in view, if the work shall prove of use to those who will give themselves the trouble to peruse it.

CONTENTS.

C O N T E N T S.

INTRODUCTION. Page 1

CHAP. I. <i>On external Inflammations; and of the Action of the Extract of Saturn on these Disorders.</i>	11—49
CHAP. II. <i>Of Contusions, Burns, Gun-shot Wounds, and the Action of the Extract of Saturn against these Diseases</i>	50—63
CHAP. III. <i>On the Use of the Extract of Saturn in external Suppurations, and particularly in Abscesses and Ulcers</i>	6—81
CHAP. IV. <i>Of Cancers, whether occult or ulcerated; and of the Action of the Extract of Saturn against these Complaints</i>	89—96
CHAP. V. <i>On Sprains, Stiffness of the Joints, and Relaxation of the Ligaments; and of the Effect of the Extract of Saturn on these Disorders</i>	96—112

C O N T E N T S.

CHAP. VI. <i>Of Gouty and Rheumatic Pains, and the salutary Effects of the Extract of Saturn in these Disorders</i>	Page 113—122
CHAP. VII. <i>On Tetters</i>	123—133
CHAP. VIII. <i>On the Itch</i>	133—157
CHAP. IX. <i>On Ruptures</i>	157—164
CHAP. X. <i>On the Piles</i>	164—167
CHAP. XI. <i>Extract of Letters and Certificates</i>	167—195

FORMULÆ. <i>Composition of the Extract of Sa- turn</i>	196
FORMULA the FIRST. <i>Composition of the Water of Saturn, or Vegeto-Mineral Water</i>	198
<i>In Inflammations</i>	200
FORMULA the SECOND. <i>Composition of the Ce- rate of Saturn</i>	201
FORMULA the THIRD. <i>On the Cataplasm</i>	203
FORMULA the FOURTH. <i>Pomatum of Saturn, against Tetters and Cutaneous Disorders</i>	205
FORMULA the FIFTH. <i>Nutritum of Saturn</i>	206
FORMULA the SIXTH. <i>A Pomatum against an Anchilosis</i>	207
FORMULA the SEVENTH. <i>The Composition of the Saturnine Plaister.</i>	209
FORMULA the EIGHTH. <i>The pure Extract of Saturn without any Modification</i>	201
FORMULA the NINTH. <i>The Tripharmacum Plaister</i>	201
FORMULA the TENTH. <i>The simple Tripharma- cum Plaister</i>	212

C O N T E N T S.

FORMULA the ELEVENTH. <i>The compound Tri-pharmacum Plaister</i>	Page 212
FORMULA the TWELFLH. <i>On the Treatment of the Itch</i>	213
<i>A Detail of my Method of treating Patients in the Itch</i>	214
FORMULA the THIRTEENTH. <i>Powder of the Extract of Saturn</i>	216

ENGLISH and FRENCH WEIGHTS Compared.

PARIS WEIGHTS. TROY WEIGHT. Avoirdupois WEIGHT.
Pounds. Ounces. Drachs. Scrup. Grs.

Grain.					
$\frac{24}{24}$ Scrupule.	-	-	-	-	-
$\frac{3}{72}$ Dragme.	-	-	-	-	-
$\frac{24}{576}$ Once.	-	-	-	-	-
$\frac{64}{4608}$ Marc.	-	-	-	-	-
$\frac{128}{9216}$ Livre.	-	-	-	-	-
TROY WEIGHT.					
Grain.	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o
Scrupule.	-	-	-	-	-
Drachm,	-	-	-	-	-
Ounce.	-	-	-	-	-
Pound.	-	-	-	-	-

Avoirdupois WEIGHT.
Ounces. Drachs.

Grain.					
$\frac{20}{20}$ Scrupule.	-	-	-	-	-
$\frac{3}{60}$ Drachm,	-	-	-	-	-
$\frac{8}{480}$ Ounce.	-	-	-	-	-
$\frac{12}{5760}$ Pound.	-	-	-	-	-
TROY WEIGHT.					
Grain.	o : .036				
Scruple.	-	-	-	-	-
Drachm,	-	-	-	-	-
Ounce.	-	-	-	-	-
Pound.	-	-	-	-	-

N. B. The Troy Ounce is also frequently divided into twenty Penny-weights, each consisting of twenty-four Grains.

Grain.					
$\frac{16}{16}$ Ounce.	-	-	-	-	-
$\frac{16}{256}$ Pound.	-	-	-	-	-
TROY WEIGHT.					
Grain.	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o	o : o : o : o : o : o
Scruple.	-	-	-	-	-
Drachm,	-	-	-	-	-
Ounce.	-	-	-	-	-
Pound.	-	-	-	-	-

N. B. In the Fractions of Grains I have taken the nearest that could be expressed by single Figures; in those of Avoirdupois Drachs I have made use of Decimals.

A

T R E A T I S E

ON

L E A D.

INTRODUCTION.

I T is to chance alone we are indebted for the major part of the remedies now successfully made use of in surgery and physic. Nature often conceals from the learned those secrets, which she afterwards pleases to communicate to the ignorant or less attentive. The discovery of the peculiar qualities of bark and mercury was more the effect

effect of chance than erudition. But though we are indebted to the former for the most approved remedies, it is not from that alone we can ever learn the proper application of them: this must be the work of time, of discernment, and experience. For we may venture to affirm, that the effects of medicine rather take their force from a proper judgement, than from any constant and inherent virtue of their own; and that it is the judicious timing and adapting the remedies, with which the art of surgery has by degrees been enriched (many of which perhaps had better be curtailed), that ought to be the principal study of the Faculty. Amongst the rest, no one, I think, deserves a higher rank than Lead. Nay, I have reason to flatter myself, that when the reader has perused the following Treatise, he will be inclined to think this metal one of the most efficacious remedies for the cure of most diseases which require the assistance of surgery.

It is true that, for many years past, its general virtues, as well as preparations, have been known; even some dispensatories partly describe the Extract of Saturn; but none give any account of the various modifications I make it undergo, and to which alone I attribute its surprising success.

I by no means pretend to publish this composition of the Extract as any new discovery of my own: my only intent, in this Treatise, is to lay before the masters of the art, and the Public,

Public, the various forms (if I may so speak) I have given this Extract, and the particular cases in which it has been specific, to the no small astonishment of the Faculty. I willingly resign to my predecessors both the good fortune and glory of having made the first discovery, and think myself sufficiently compensated in having been able so far to modify this medicine, as to render it superior to any other made use of by the masters of the art. Less prejudiced in favour of my own work, than inflamed with a desire of being useful to mankind, I shall trouble my readers more with Observations than arguments: was I to defer any longer making them public, I should have reason to reproach myself with robbing the community of an inestimable treasure.

It is a subject of no small surprise to me, that, notwithstanding the many known and justly-esteemed properties of Lead, the disuse of it should be so great in the present age. What elogiums does Galen bestow on this metal, in his tenth book of simple medicines? How many celebrated writers, who flourished after this commentator of Hippocrates, have mentioned it with enthusiasm? With what particular marks of distinction have not the chymists treated it? What can, possibly, be more conclusive in its favour that John Bequin's own words, a famous chymist, who lived in the last century? How much is the use of this metal recommended by Pigrai,

Etmuller, Fabricius Ab Aqua Pendente, Gui de Chauliac, Lemeri, Stahl, Mr. Deidier, professor at Montpellier, and by a thousand others, whose authorities must have great weight?

Encouraged by so many reputable writers, but convinced still more by my own experience, I found, in the course of many years practice, that the Extract of Saturn was much wanted in surgery. The many different forms I have given this medicine render it very proper for a variety of external complaints. I should with difficulty have advanced that it had succeeded in some internal ones, had not the cures been performed in the presence, and under the inspection, of many celebrated practitioners, both in surgery and physic, at Montpellier; an account of which I shall give in the sequel. I am well convinced, that in general, the internal use of Lead is condemned; but may it not be deprived of its noxious quality by certain preparations, and administered in small doses? Does not Mr. Van Swieten (an author of great repute in the present age) give internally the corrosive sublimate with great success? But I will say no more on this head, my design being only to shew its good effects in external complaints.

My own experience, conjointly with that of many of the Faculty, gives a sanction to this remedy; proving it at the same time to be infinitely superior to many in use. The facts are

are indisputable; the Public is well acquainted with them; and the Military Hospital at Montpellier for the venereal disease has afforded me so many opportunities of making repeated experiments of this medicine, that the bare recital of the cures it has performed would furnish matter for many volumes.

I cannot conceal the satisfaction I have felt, in being eye-witness of the gradual progress the Extract of Lead has made for some years past; the most skilful practitioners encourage its use; and even the Ministry give it their sanction. Mr. Imbert, chancellor of the university, inspector-general of the hospitals of Provence, Languedoc, and Roussillon, was commissioned, by Letters from the Marquis du Paulmy, secretary at war, bearing date the 27th of October, and the 8th of December, 1756, and the 18th of January 1757, to order various experiments to be made of this Extract, in the hospitals under his inspection. This minister adds, that in the hospitals where it was tried, it met with general approbation. Mr. Imbert never published the success of his experiments; but he assured me, that he had given the Court a very favourable account of them.

Opportunities so frequently offer of making use of the Extract of Saturn, and the Observations I have made prove it applicable, in its different forms, to so many disorders, that I thought it incumbent on me to lay before the Public the various modifications

it should undergoe, according to the variety of cases.

1. The Extract of Saturn, mixed with water, constitutes a liquor, which I shall call Vegeto-mineral : this is very proper to calm all sorts of inflammations, and cure all disorders of the skin, viz. the itch, tetterers, &c.

This liquor may very well be substituted in the place of wine and brandy, (in every case where these are generally used) as likewise in that of different embrocations, commonly prescribed for inflammations ; and more particularly such as attend gun shot wounds : it is likewise very proper for contusions, bruises, sprains, echymoses ; for the healing of ulcers, whether scropulous, venereal, or cancerous, &c. In these cases, and many others, it is to be applied either by injection, fomentation, or bath. We are not even afraid of asserting, that this liquor may be successfully used to stop a gangrene.

In fine, an uninterrupted series of success (when made use of in internal inflammations) has sufficiently proved, that it ought to be preferred to emollient decoctions, poultices, and many other remedies, generally prescribed, which too often prove contrary to the nature of the disease. Of this I hope to convince my readers in the chapter on Inflammation.

2. This Extract of Saturn is the basis of a medicine, much hitherto wanted in surgery, with

with which I have performed many cures : of these I published an account in the year 1746, and propose taking notice of them again in the present edition.

3. The Extract of Saturn, mixed up with oil of roses, wax, and camphor, forms a Pomatum of extraordinary virtue ; an account of which I shall give in the sequel.

4. It is with this Extract, wax, and camphor, I make a Plaister, which many years experience has proved to be infallible in the rheumatism.

5. The Extract of Saturn, mixed with soap *, may be very advantageously used in an anchylosis, or stiffness of a joint, or for dispersing all viscous humours seated in the nervous involucra, or coverings of the tendons.

6. The residuum of the Extract of Saturn is a very great disperser : this experience has proved on many occasions.

7. We frequently use poultices of bread and Vegeto-mineral Water for cold, schirrhous, and scrophulous tumours : by their means we not only see these tumours dispersed, but very often abscesses, though suppurated in different places. Of this last effect many of the Faculty have been eye-witnesses, not without some degree of surprize.

8. The Extract of Saturn may be very properly applied after lithotomy ; or many other operations in surgery.

* The addition of soap I owe to the Marechal de Richlieu.

Here I cannot avoid making a reflection, which seems proper to illustrate the many virtues which a constant and successful practice of many years has convinced me are to be found in Lead, and its different preparations. The antiquits, who practised more from their own observations and experience than we do, seldom left out some preparation of Lead in their prescriptions for external complaints. This the different dispensatories sufficiently prove. Mr. Faget, an eminent Paris surgeon, has found the tripharmacum to be almost a sovereign remedy for many chirurgical disorders. Now it is well known that this plaister, which is described word for word by Bauderon, and was, before him, mentioned by Mesn^e, has litharge for its basis, and to that owes its efficacy. How then will it be possible for any one, considering the general approbation this metal has met with for many years past, not to find in it a quality never hitherto discovered in any other? In effect, where is a medicine to be found, whose particles are at the same time mild, ponderous, flexible, and, by my preparations of it, so subdivided as to be capable of being introduced into the most minute vessels; whose texture is so fine, and whose compactibility is so great? I mean that of the nerves, tendons, aponeuroses, membranes, &c. preserving at the same time their own activity on the blood and lymphatic vessels, restoring inflamed parts, swelled and schirrhous glands,

to their natural tone, removing obstructions therein, and giving a proper circulation to the inspissated and stagnated fluids. Can any one then refuse the Extract of Saturn that dispersing and penetrating quality, which daily experience proves to characterise it?

By what has been already advanced, the reader may perceive, that the different preparations of Lead have always been held in great esteem. Is not then the present disuse of it very detrimental to society? I have some reason to flatter myself, that for the time to come it will more frequently enter into medical prescriptions, and that my own Observations will have some small share in giving it the pre-eminence it so justly deserves; and at the same time encourage those to experience its good effects, who before, from prejudice, were deterred from its use.

Nor are the superior powers of this medicine its only commendations; the Public, as well as the royal hospitals, I can venture to assert, may reap great advantages from its low price; greater, perhaps, than at first may be imagined. An hospital large enough to contain two hundred invalids may be supplied with this medicine, for six months, at the easy rate of one hundred livres, or about four pounds three shillings and sixpence; and this without any danger of the same being adulterated, or otherwise employed, than for the use of the said hospital. The same can by no

means be said of wine, brandy, or many other ingredients used in medicine, and often purchased at a high price.

I cannot help remarking a farther advantage the Public may reap in making use of this medicine; I mean the easy rate it may be conveyed at from one place to another: for with some quarts of this Extract (the carriage of which can never be very expensive, though the hospitals are at a great distance) many hogsheads of the Vegeto-mineral Water may be made.

This is the path I open to the practitioners in surgery for the cure of many disorders incident to their province: I have no other view in my commendations of the different preparations of Lead, in the Observations and Reflections I have already made or shall make in this Treatise, than of being useful to the Hospitals and the Public. I flatter myself that the world is in some measure indebted to me for publishing this medicine; which, if concealed in my own breast, might have turned out much more to my private emolument. Let not Envy then endeavour to take from this Extract the encomiums it so justly deserves: my ambition is to convince the world, that the only motive I had in making it public was a regard for my fellow-creatures. For my own part, I shall think myself sufficiently recompensed, if my constant application and uninterrupted observations contribute to the public welfare.

C H A P. I.

On external Inflammations; and of the Action of the Extract of Saturn on these Disorders.

A N inflammation of the external parts of the body is a very common disease, and may proceed from a thousand different causes; such as a blow, a fall, a contusion, &c. from external accident: internally from any local defect of the solids; from the contraction of the smaller vessels; from their spasm; from their compression, constriction, and obstruction; from the difficulty which the blood finds in passing the extremity of the arteries; from its too great quantity, thickness, viscosity, mixture with heterogeneous and virulent parts; or from any other alteration, whether simple or combined, &c.

This disorder attacks indiscriminately all the parts of the human frame which are composed of sanguineous and lymphatic vessels. Thus in regard to the external parts, nothing is so common as inflammations of the skin, fat, glands, muscles, membranes, tendons, aponeuroses, and of all the organs which fall under the senses.

The inflammatory state is often accompanied with very mild symptoms; but, on the

contrary, frequently with violent ones. This difference in the violence of the symptoms merits all the attention of the practitioner, seeing it is principally upon that he ought to establish his prognostic and plan of cure. What general disorder are not the principal œconomical and animal functions thrown into by an inflammation of an aponeurosis, or of a tendon? Nay, convulsions, faintings, even death itself, are but too often the fatal consequences. What is not to be apprehended from an inflammation which tends to a mortification; especially if deeply lodged in the internal parts, or attacks a bad subject?

These considerations and a thousand others, of which it is not my intention to give a detail in this work, ought to make the surgeon sensible, how very necessary it is for him to be well acquainted with the remedies that are proper for the subduing of inflammations.

These very remedies are in every one's hands, and the most ignorant may blush not to be acquainted with them. But do they deserve those praises, and that degree of confidence, which is bestowed upon them? This is a question which their effects alone can decide.

Now it is very certain, and universally acknowledged by men of sense, that the effect of the external applications usually prescribed for inflammations, often disappoint our expectation. Sometimes they consist of oleaginous and greasy substances, which stuff up

the

the pores of the inflamed part, and increase the symptoms by augmenting the volume of the stagnated fluids: at other times they consist of emollient and mucilaginous parts, which conveying a great quantity of moisture, very much relax the texture of the vessels, and disable them from getting clear of the redundancy of blood. Sometimes these applications have powerful astringent particles in their compositions, which repel the inflammatory matter, and throw it upon the organs necessary for life: at other times these compositions are very active and irritative, and contract the vessels so powerfully, as to prevent them from recovering their tone; by which all motion in the inflamed part becomes totally interrupted. No one need then be surprised, after such applications, if all the symptoms are increased instead of being diminished. Nothing but blind prejudice can conceal from us the inconveniences and dangers attending the application of them; and humanity itself is sufficient to deter us from the farther use of them, at least in most cases.

We constantly avoid these different rocks, by making use of the Extract of Saturn. A considerable number of Observations, made during my practice of these twenty years past, have convinced me, that this medicine is the true specific for the treatment of all external inflammations: its effect is infallible, and often surpasses our expectations, by promoting

ing at sight the resolution of the most violent inflammations, and even sometimes after they have suppurated. The fact last mentioned will appear surprising, and perhaps incredible, to the masters of the art : I myself with difficulty should have been convinced of it, had not I frequently seen and demonstrated it, especially in the Royal Hospital, where I had frequently opportunities of treating these kinds of diseases.

This remedy, then, has always succeeded with me, at a time when the most reputable applications have proved either useless or pernicious ; but those will be less surprised with its amazing effects, who maturely consider its composition, and its manner of action.

The first thing to be observed in the Extract of Saturn, are the leaden particles suspended in the liquid ; which is the consequence of the ebullition of the litharge with the vinegar. These particles are so formed, as to be capable of entering the pores of the skin, and the orifices of the smallest vessels : upon these they act by their weight and volume, and disperse the humours which choak the inflamed vessels, augment their motion, and bring them back to the course of circulation. This particular action of the particles of the Lead is assisted by that of the liquid, which is its vehicle. This liquid has not only the property of softening and attenuating the viscid humours which choak up the

the inflamed vessels, but likewise (notwithstanding the ebullition) increasing the spring of these vessels, without irritating them. The consequence of this is, a resolution of the inflamed part, a cessation of the pain, and other inflammatory symptoms: all this, I say, is effected by the Extract of Saturn alone; the efficacy of which, in these disorders, may be looked upon as a maxim in surgery.

This metallic remedy acts in the same manner against all obstructions in the lymphatic vessels, cutaneous disorders, and scirrhouous tumours: this I hope to prove in my Observations.

From hence it appears of what importance it must be, to change the opinion of those who look upon the preparations of Lead to be dangerous: it is an erroneous prejudice, which deserves the greatest attention from the practitioner. I do not despair of their thinking even as I do, if they will give themselves the trouble of reading this Work.

I cannot too much exclaim against the practice of those who employ emollient and relaxing fomentations in the treatment of external inflammations. It is true, these remedies are often strongly recommended by practitioners, and many chirurgical writers; but neither the one nor the other can deny, that the use of these applications has been often followed by the most fatal disasters.

A surgeon, in some degree of reputation, who is a great partisan of emollient decoctions,

decoctions, consumed so great a quantity of mallows and other emollient plants, in a campaign of three months only, that he exhausted the whole country where the French army was encamped : the inconvenience which resulted from this, was a production of worms in almost all the gun-shot wounds, which he ought to have stimulated and recalled to life, instead of accelerating the mortification by emollients. This fact, which makes no apology for emollient and relaxing medicines, was attested to me by many of that profession, who attended the army at that time.

I cannot then help being surprised that this error is not corrected ; particularly as the art of surgery has been so much improved of late years, and so few of the Faculty can possibly be ignorant of the bad effect of emollients. How is it possible to reconcile the action of these medicines with the idea every one must form to himself of the nature of inflammation ? Is it not, on the contrary, very certain that by this kind of application, we relax more and more the tumefied vessels ? that we render them by this means susceptible of a still greater distension, and actually contribute to the evil terminations of inflammatory disorders ? By their use the heat of suppuration is augmented ; a gangrene and corruption of the parts brought on ; and seldom, very seldom, is the tumour seen to disperse, which ought to be the principal aim of the practitioner, and which can often be effected

effected by this metallic remedy only. Of this many of the Faculty are as well convinced as myself; and I make no doubt, but all those who will give themselves the trouble to read the Observations which constitute a great part of the present work, and apply them properly, will easily admit that this remedy ought to be preferred to all others, in the treatment of an external inflammation, whether it be recent, or of a long standing, simple or complicated, benign or malignant; in short, in all the circumstances in which it can be considered.

I must now anticipate an objection, which will undoubtedly be made to me; and that is, after having condemned the use of emollients, I still mix them up with my own remedy. But it is to be remarked, that a proper mixture is often very necessary, which the most successful experiments have sufficiently proved: this fact, I believe, will be acknowledged by those who will read my Observations. But, among emollients, the one I mostly prefer is the crumbs of bread: for it only relaxes the part as far as is necessary to facilitate the passage of the particles of the Lead into the tumefied vessels, without partaking of the bad qualities of oleaginous and greasy medicines, which ought always to be laid aside in inflammatory cases.

Before we enter into a detail of the different species of inflammation, to which my remedy is applicable, I cannot help complaining loudly

loudly against the imputation of the repulsive power that has been attributed to Lead and its preparations. I know how much the error has been propagated, and that it has been supported for ages by the most respectable authorities ; but truth has unlimited rights which ought to have the preference to all authorities, especially in questions that relate to facts, which experience alone can determine. Upon this principle, I will not stop at the crowd of chirurgical writers, who have attributed this repercuſſive quality to Lead ; but, among the rest, there is one whose name alone may give weight to the error, against which I contend. The author I speak of is Mr. Quesnay, who, in his Treatise on Suppuration, has placed the preparations of Lead among the number of repelling medicines. He relates many Observations, which prove that litharge, white lead, &c. have been employed with very good success, in different inflammations. Mr. Quesnay, in these cases which he has related, makes no doubt of their having acted by repercuſſion : but this can by means be proved by his own cases. For, first, as he did not employ these remedies solely, but mixed them up with other compositions, so it does not follow that the preparations of Lead have a repelling quality, from the cure haveing been operated by repercuſſion. Again, who knows but the prejudices of the gentlemen who made the Observations quoted by Mr. Quesnay, may have

have concealed from them the true manner in which the medicine usually acted and have induced them to attribute to repercuSSION effects which did not proceed from it ? But let that be as it will, I can protest, upon the foundation of an experience that never deceived me, that the repelling power attributed to Lead and its preparations, is one of the greatest errors that have slipt into the practice of surgery, and one of those in which it behoves practitioners mostly to be undeceived.

Among the different inflammations that have fallen within my practice, that of the erisipelas, or St. Anthony's fire, has been the most frequent. This disease makes advances, which not only proceed from the cause which produced it, and the part that is affected, but also from the remedies commonly made use of to subdue it.

Among erisipelatous inflammations, such as tend to a phlegmon, or gangrene, may be most easily distinguished, being limited to a certain extent in the skin : these require the greatest attention and expedition in the treatment, if we wish to screen the parts affected from the terrible danger which threatens them.

Confirmed by the success which has often attended the use of my metallic remedy, I have applied it in every kind of erisipelas ; and my method has been followed by many other practitioners, who have been surprized at

at the celerity of its good effects ; confessing, that they had till then been mistaken ; and blaming those who abstained, in similar cases, from using this medicine, for fear of making the inflammatory matter flow back into the mass of blood. This fear, which the enemies of the Extract of Saturn industriously propagated, gave them a pretence for not abandoning their old opinions, which are certainly as chimerical as their reasonings on the actions of emollients.

Our remedy (the resolving powers of which no one can dispute) has this peculiar advantage, That, if it does not always procure a dispersion of certain inflammations, which it generally does, it much diminishes the heat of suppurations, which is often to be dreaded ; above all in such erisipelas's as are produced by putrid cases, as experience proves, and has been well remarked by Mr. Quesnay.

Every one knows, that the termination of fiery inflammations by resolution, is always most desirable ; for, in such cases, a suppuration is often attended with such fatal symptoms, that a gangrene, which has always been considered by practitioners as the most dangerous issue of inflammations is often more tractable, than obstinate, bleeding ulcers, into which an erisipelas that suppurates, ordinarily degenerates. Now the medicine which we make use of in subduing fiery tumours constantly favours a dispersion ; and thus screens those, who are afflicted with such

such maladies, from the dangerous turns which we have just mentioned.

But it would be restraining the Extract of Saturn to every narrow limits, if we confined its actions to erisipelatous inflammations only it acts with no less efficacy in phlegmonous ones, how painful soever or violent in their symptoms in boils; in inflammations attended with great heat; in whit-loes in inflammations of the glands under and behind the ear, whether they are the symptoms of a disease, or constitute the disease itself; in quinsies; in ophthalmies; in a word, in all external affections that partake more or less of the inflammatory state.

1. Red painful tumours, attended with a pulsation and burning heat, called phlegmons, often put the patient in imminent danger. Some of these are seated in every sensible parts, and accompanied with cruel pains, delirium, sharp fever, and other alarming symptoms. Others principally attack the fat, and are followed by a suppuration, which is not easily removed. Others, again, are formed upon certain delicate organs, and from thence acquire a greater degree of malignancy; as upon the globe of the eye, or its adjacent parts, &c. In general, these phlegmonous inflammations hurry to a period, generally terminate in suppuration, sometimes in a hard tumour, and at other times in a mortification. The masters of the art
who

who have employed the Extract of Saturn for these complaints, know how proper it is to calm the pains, to dissipate the inflammatory matter, to prevent an abundant suppuration; in fine, to disperse the inspissated humours, and prevent their induration.

2. Our application is not less successful in malignant boils, deeply seated in the fat, and which often resist the action of other medicines. The particles of Lead, by their suppleness and tenuity, not only enter the little cells or glands which these boils attack, and attenuate the viscous matter lodged therein, but also the little vessels which communicate moisture to these folliculous and glandulous cavities, and give motion to the inspissated blood which caused the obstruction.

3. Though I have had no opportunity of applying my remedy in Carbuncles, I make no doubt but it would be of great use in allaying the heat and acute pain which generally attends them: its good effects in cancerous tumours and others, which are characterised by a great acrimony and corroding quality in the humours, enable me to conclude by analogy, that it may be of great use in the above-mentioned disorder. I shall assiduously endeavour in the course of practice to employ my Extract for that complaint, when an occasion offers.

4. Without entering into a long detail on the subject of inflammations which attack the

the extremity of the fingers, called the whitloe ; I will confine myself to observe, that the greater or less violence of the heat, pain, and other symptoms, an assemblage of which characterises the disease, depends entirely upon the different parts of the finger wherein they are seated. It is upon this variety that the division of the whitloe into different kinds is founded. The first is confined to the skin and fat, and is the mildest of all ; though sometimes indeed it happens, that by the inflammation and suppuration of the fat, which is found at the extremity of the fingers, we see the patient run great risks : for this inflammation continuing on to their basis, and passing through different channels of the internal part of the metacarpus, brings a considerable tumour over the whole hand, which is penetrated in various directions by the purulent matter : it is principally in whitloes that are neglected or ill-treated, in which these fatal consequences are observed. The second kind is seated in the nervous involucra belonging to the flexor muscles of the fingers, and is attended with the most cruel pains, which are communicated to the adjoining fingers, hand, and even the arm itself ; the heat is so great as to become sometimes insupportable : one may have seen patients tortured in this manner beg to have the finger cut off, not being able to bear the intense pain. To these symptoms is joined a very sharp fever, and a number of other

other alarming circumstances, which announce the general disorder of all the functions. Sometimes this second species of whitloe terminates in sudden death, caused by the violence of the inflammation, or in a more lingering one, the effect of a suppuration, penetrating in various directions along the hand, wrist, and arm, where it forms matter, and brings on a train of a thousand mortal symptoms. The periosteum inflamed and suppurated constitutes the third kind of whitloe, in which the pains are very acute, and deeply seated. This is also attended with a violent fever, want of sleep, delirium, and many other symptoms which are commonly produced by the same cause as intense pain; the patient often falls into fainting-fits, and a caries of the bones is much to be apprehended from the third kind. The whitloe, which is seated under the nail, often arises from the puncture of a thorn, a needle, or any sharp-pointed body, which passes between the nail and the flesh. The immobility of the joints, which too frequently follows the second and third species of whitloe, proceeds from the destruction of the tendons and ligaments which tie the articulations together; this takes its rise from suppuration, gangrene, and often from both.

From what has been already said, it is evident how important it must be to apply the most expeditious and efficacious remedies to whit-

whitloes, both to calm the violence of the symptoms, and prevent the dangerous consequences. I should be sorry to recommend the Extract of Saturn as the only agent to which we may have recourse in all these cases; but I can confidently affirm, that this application has generally proved successful in these inflammations, when the common ones have often been very detrimental. I call to witness my colleagues, who are inclined to speak truth; and demand of them, whether they have not found, by experience, that the emollient applications generally made use of in whitloes, so far from procuring a resolution, have daily increased the heat and other sympoms? The success of our metallic remedy is infallible, if applied in the beginning of a whitloe, and before it has made a certain progress: I have even used it in the advanced stages of that complaint, and performed the cure in a few days.

5. The puncture of a tendon-and aponeurosis deserves the greatest attention of the practitioner. It is almost incredible how a solution of continuity so slight, and often imperceptible, should excite the sharpest fever; occasion the most violent inflammatory symptoms, and many other alarming accidents; such, for example, as attend blood-letting, when the aponeurosis of the biceps has been punctured, or any other injury which is offered to the tendinous and aponeurotic parts of our body. In all these cirtumstances, I

C have

26. A TREATISE ON LEAD.

have seen the Vegeto-mineral water, and poultices made of the said water, perform wonders: an eye-witness only could have given credit to what I relate; and all these cures far exceed such as are performed by the common method of practice.

6. Inflammatory tumours of the glands below the ear frequently occur in practice: they sometimes arise independent of any preceding complaint, but are often the consequences of putrid fevers, of which they are sometimes a crisis, and sometimes only a symptom, but almost always disposed to be schirrhous. How many times, by the use of improper applications to these glands, have we not seen the matter repelled upon the brain, lungs, or some other internal organ, and produce mortal symptoms? The Extract of Saturn is an excellent resource, and may be made use of either to disperse these tumours, when possible and expedient so to do, or to diminish the suppuration, and make it more laudable. The Extract is equally successful against inflammations of the maxillary glands, or those of the neck.

7. Although I did not propose mentioning internal inflammations in this work, yet I cannot overlook the quinsey; a disorder which is well known to seize the external and internal parts of the throat. The horrid consequences attending this inflammation often put the patient's life in imminent danger. The quincy is susceptible of the usual terminations

nations of inflammatory tumours ; and it is but too often we see it suppurate and end in a mortification : the speedy relief which follows the application of the Vege-to-mineral Water, authorises me to affirm, that there is no better remedy against inflammations of the throat.

I am not the only one who has experienced the good effects of the preparations of Lead in the treatment of quinsies, particularly of those which tend to a mortification. Mr. Raulin, physician in ordinary to the King, has successfully used it in similar cases, as he has informed the world in his Treatise on Diseases occasioned by Variations of the Air. The following is his account of it :

" I ordered a garganism of rose-water into
" which were thrown some grains of the salt
" of Lead : the remedy did wonders ; it pre-
" vented a mortification, and put a stop to
" that already formed ; it dissipated the spots
" in a short time, and, with the assistance of
" camphor and phlebotomy, performed cures
" wherever it was applied. In a neighbour-
" ing town, where sore throats raged, very
" few died who used the salt of Lead." Some
contradictions that Mr. Raulin had been
exposed to from his colleagues, who wanted
to substitute the salt of Vitriol for the salt
of Lead, convinced that physician of the su-
periority of the last medicine over the for-
mer. He has learnedly given his reasons in
his Treatise.

The happy effects of the salt of Lead in Mr. Raulin's hands, induced other practitioners to follow the same track.

In the Medicinal Journal of June 1758, there is an interesting letter, addressed to Mr. Vaudermonde by Mr. Boucher, a celebrated physician of Lille in Flanders, who, after having unsuccessfully tried all kinds of medicines to subdue a putrid quinsey, which depopulated the environs of that city, determined at last to make use of the salt of Lead in one of these cases, which he had under his inspection. The mortified crusts had so far prevailed, as to cover a great part of the tonsils, and the anterior pillars of their partition. To this end, he mixed four-and-twenty grains of the salt of Lead in two ounces of plantain-water, with which he touched the crusts five or six times a day, with a pencil made of lint. This remedy, says Mr. Boucher, not only prevented the disease from gaining ground, but the ulcers were daily observed to contract, and the eighth day consolidated; and consequently what remained of the disease was easily conquered.

But, leaving the experiments of others, to keep to those which are our own, we can advance that, upon innumerable occasions, the Vegeto-mineral Water has appeared to us a specific against inflammations of the throat, fluxions on the same part, irritations and ulcers seated in the mouth, from whatever cause they proceed.

It is also difficult to express with what success the preparations of Lead are used in those accidents which Mercury sometimes produces in the mouth and neighbouring parts. The Venereal Military Hospital furnishes us every day with Observations which the most incredulous cannot help believing,

8. It now remains for us to speak of the inflammation of the eyes, known by the name of Ophthalmia. This disease requires to be treated with the greater attention, as it attacks a very delicate organ, upon which certain applications, very proper for other parts, makes the most hurtful impressions. These ophthalmies are often very inveterate, and obstinately resist the applications which are generally made use of for subduing them; if then the common method of treating them is often unsuccessful, and even injurious, why not have recourse to a remedy which experience proves infallible, however considerable and inveterate the ophthalmia may be? This remedy is no other than the Extract of Saturn; the efficacy of which against this species of inflammation is generally known, not only at Montpellier, but in many other places. The numberless cures of the kind effected by this remedy, both in my own practice and that of others, would furnish matter for a volume; but I shall confine myself, at the end of this chapter, to a narration of the most curious and remarkable.

From what has been said it follows, that there is not to be found, among all the chirurgical prescriptions, a medicine more adapted than the Extract of Saturn for subduing external inflammations; that it is endowed with the singular property of penetrating the obstructed blood and lymphatic vessels, and of dispersing the inspissated matter therein, without too much relaxing or irritating the coats of the inflamed parts; it preserves a medium between these two actions, and thereby insensibly produces, without any bad consequences, the most surprising effects. This remedy seems to unite, at once, three qualities very essential for an antiphlogistic medicine; a cooling virtue, which the most ardent inflammatory heat cannot resist; an anodyne one, which quiets the most violent pains observed in inflammation; an attenuating, resolving quality, which the prejudiced part of mankind has unfairly confounded with repulsion: in short, all the parts of our body, without distinction, fatty, glandulous, muscular, tendinous, aponeurotic, membranous, ligamentinous, weak or strong in their texture, endowed with a greater or less degree of sensibility, bear equally the action of our metallic remedy.

But not to enter into theoretical discussions, we will begin to fulfil our former engagements; and give an account of such Observations as we have made ourselves, or have been

been communicated to us by others, upon external inflammations. They all tend invincibly to prove, that the praises which have been given the Extract of Saturn, and the virtues attributed to it, are not chimerical inventions of the brain.

O B S E R V A T I O N I.

*Communicated by Mr. GAUTIER, Surgeon, at Aix
in Provence.*

MR. GUILHEMON, my confrere, attended a patient, afflicted with a phlegmonous erispelas, which was seated on the inward part of the right thigh; the pain and inflammation were so great, that a gangrene was apprehended. Repeated phlebotomy and applications of emollient and anodyne medicines, so far from relieving the complaint, seemed to encrease the bad symptoms; and so much so, that recourse was had very a-propos to the Vegeto-mineral Water, which soon calmed the pains, and restored the patient, in a short time, to his former health.

O B S E R V A T I O N II.

Communicated by the same.

MR. PANEN has communicated to me a more extraordinary cure, by the Extract of Saturn, of an erispelas of the worst kind, which had seized one eye-lid, and a great part of the face: the whole was much disposed to a gangrene. At first different emollients were applied; but upon their not succeeding, recourse was had to the Vegeto-mineral Water, which, in less than forty hours, abated the bad symptoms, and in a short time after performed the cure.

OBSERVATION III.

Communicated by Mr. REGIS, Surgeon, at Montpellier.

I WAS called in, to a stone-cutter's wife of this town, who had been troubled for above a month with an erisipelatous swelling in her breast, from the curdling of her milk; her pains were so great, that she could neither rest day nor night: many women of her acquaintance had prescribed to her without success. The swelling at last began to suppurate: and though it discharged in three different places, her pains were by no means abated. As the matter came away but slowly, the breast continued of an enormous size; nor was its hardness or livid colour at all diminished; so that there was great reason to fear, that the tumour would either become schirrhous or cancerous. As I had been often witness of the good effects of the Vegeto-mineral Water on the like occasion, I ordered a cataplasm of the said Water and white bread; taking care previously to wash the sores well with the above Water. This treatment, properly continued so far removed the complaint, that my patient slept well the third night: in a short time the breast began to soften, the wounds to cicatrize, and in five-and twenty days the cure was performed: though for some time after, the breast continued discoloured; which was soon remedied by the application of compresses dipped in the Vegeto-mineral Water.

OBSERVATION IV.

Communicated by Mr. LAZAU.

MR. LAZAU, an elve of Mr. Serres, a confrere of mine, informed me, that he had made use of my medicine for an œdematosus erisipelas, which had seized

seized the leg of a poor man, in the General Hospital: it took its rise from a bleeding in the foot, which was very much swelled, as was the whole leg. The application of my remedy sensibly diminished both the inflammation and swelling in three or four hours: and the third day my patient was cured.

OBSERVATION V.

*Communicated by Mr. Roux, Surgeon-major to
Vastan's Regiment.*

MR. ROUX has informed me, that he had cured with the Vegeto-mineral Water many patients afflicted with erisipelas's in different parts of the body, in three or four days time.

OBSERVATION VI.

*Communicated by Mr. COULAS, Doctor of Physic,
of the University of Montpellier.*

I WAS called in, to a child troubled with an erisipelas, which extended itself along the lower extremity of its right side: I ordered compresses dipped in the Vegeto-mineral Water to be applied to the tumour. As the patient was in the country, and suffered a great deal, it was thought proper to apply a poultice made of bread, mallows, and pellitory of the wall, till some of the Extract of Saturn could be procured. The consequence of this was, that the erisipelas became more inflamed, and extended itself upon the buttock; but the damage was soon repaired by the application of the Vegeto-mineral Water; by degrees the inflammatory symptoms disappeared, the fever went off, and in two days time the disorder was conquered.

Note, That Mr. Coulas remarks in his account, that the cure of the erisipelas was entirely owing to

the Vegeto-mineral Water, as the child could by no means be prevailed on to take any internal medicines proper for the occasion.

OBSERVATION VII.

THE wife of one Cassagnes of Lansargues, was troubled with a coagulation of milk in one of her breasts, in the month of February last. This woman, not being able to support the pain, made use of many different emollient medicines, which had been prescribed to her by her acquaintance; but they only served to encrease the swelling and bad symptoms; and so much so, that the matter forced its way through the skin, in many places: still the breast continued very large, and appeared schirrhous, and of an erisipelatous colour; which made all who saw it dread the worst consequences. As soon as I had examined the complaint, I gave her some Vegeto-mineral Water to make poultices of, and ordered them to be renewed every six hours: in a few days there was a change for the better, to the no small astonishment of herself and friends; and in five or six weeks the cure was compleated.

OBSERVATION VIII.

IN the month of March last, I was sent for to the Citadel, to the son of Mr. Coste, goaler. This child, about four years old, was troubled with an erisipelas, which extended from the upper part of the thigh to the inferior one of the hypogastric region, as likewise with a phlegmonous swelling on the groin. The erisipelas reached to the scrotum and penis, and there caused a phymosis, which obstructed the passage of the urine. The child was blooded once; and poultices made of bread and the Vegeto-mineral Water, in the space of eight or ten days, dispersed both the erisipelas and phlegmon.

OBSERVATION IX.

Communicated by Mr. MENON, Surgeon to a Battalion of Militia.

I MADE use of Vegeto-mineral Water for the cure of a child, seven or eight years old, afflicted with an erisipelas which covered its whole body. Monsieur Goulard's frequent use of this medicine, of which I had been eye witness in the Royal Hospital, induced me to try it. In a few days after the application, all the cuticle came off in scales; and in eight days the child was cured. Many other surgeons, on the like occasion, have made use of this remedy with the same success.

OBSERVATION X.

MADAME DE FUR, wife to Major De Fur, was so much alarmed on seeing one of her children fall, that both her breasts were in an instant seized with an erisipelatous eruption, which even spread considerably above them. This lady soon after came to Montpellier. I found upon examining her, that the disorder would soon become of the tetter kind, on account of the continual itchings: I applied the Pomatum I generally make use of for tatters, and washed the parts well with the Vegeto-mineral Water; the itching was soon removed; but as this lady suckled her child, the remedies operated but slowly; which determined me to make use of the Cataplasma made with the Vegeto-mineral Water. This had the desired effect; and in a few days the complaint was removed.

OBSERVATION XI..

Communicated.

AN Invalid, of St. Francis's hospital at Mahon, in consequence of a fever, had two malignant boils.

36 A TREATISE ON LEAD.

on the upper part of the thigh, about four fingers breadth asunder. These tumours were considerable and so painful, that they brought on a violent fever. Emollient cataplasms were applied without any effect; recourse was then had to maturing plasters: these caused such an inflammation in the part, that a gangrene was apprehended: in fine, a surgeon-major, who had heard of the virtues of the Extract of Saturn, applied cataplasms made with the Vegeto-mineral Water: soon after the tumours had a better aspect, the suppuration was laudable, and the cure was performed by this medicine alone.

OBSERVATION XII.

DURING my stay at Paris, in the year 1751, I was desired to see Mr. Floberg, engineer, who was lodged in the Marquis de Crillon's house. He had a whitloe of the malignant kind on one of the fingers of his right hand; this was accompanied by a sharp fever, and pains which extended all up the right arm. The application of the Vegeto-mineral Water instantaneously eased the pain; in four-and-twenty hours the bad symptoms vanished; and in a very short time my patient was cured.

OBSERVATION XIII.

A CHAMBER-MAID of Madame Imbert had a whitloe on the middle finger of her right hand: this brought on a fever and insomnium; and her pains were so great, that she could not help crying out. After suffering for six-and-thirty-hours, without being willing to try any remedy, she called upon me. I found it to be a real whitloe, and thought it too ripe to be cured without suppuration. I ordered the finger to be bathed in Vegeto-mineral Water; in less than a quarter of an hour,

the

the pain so far abated, that the patient thought herself quite cured. I continued the treatment, with the simple application of cataplasms made of bread and the above mentioned Water. In five days the complaint was entirely removed by resolution alone.

OBSERVATION XIV.

I WAS desired in the year 1748 by Mr. De Beloy, colonel of a regiment of light troops at Genoa to visit Mr. Falcon, an officer: he had received a wound with a sword in the common tendon of the flexor muscles of the fingers, of the internal part of the right hand. The inflammation was very great, and extended upon the fore-arm to the protuberance of the humerus. By the application of compresses dipped in the Vegeto-mineral Water, the pain ceased, the swelling subsided, and the cure was compleated in a few days.

OBSERVATION XV.

A WASHERWOMAN at Genoa was pricked by a thorn in one of the flexor tendons of the right hand: matter formed therein; and after a long suppuration, the hand remained motionless, as did likewise the fingers. She had been some time in this situation before she consulted me. I ordered her to bathe her hand, morning and night, in the vegeto-mineral water: I then applied my Saturnine Plaster, which in ten or twelve days compleated the cure.

OBSERVATION XVI.

Communicated by Mr. Roux, senior Surgeon-major, in the Army.

I WAS called in to a patient who had a considerable tumour on the arm and fore-arm, accompanied with a fever. It was owing to a puncture

of

38 A TREATISE ON LEAD.

of the aponeurosis of the biceps in bleeding. The application of compresses dipped in *Vegeto-mineral Water*, and wetted from time to time: soon dissipated the bad symptoms, and the patient was soon radically cured.

OBSERVATION XVII.

IN consequence of bleeding, in which the aponeurosis had been pricked, a lady had a violent inflammation and tumour in her arm and fore-arm. In vain did the surgeon who was called in before me apply emollients for a considerable time: I substituted in their room the *Vegeto-mineral Water*, which succeeded with me in this case, as well as in the former.

OBSERVATION XVIII.

MR. BOURQUENOD, my confrere, was sent for to a lady of this town, who, after a bleeding in the arm, felt a considerable pain along the inside of the fore-arm, down to the extremity of her fingers. This accident had happened to her three weeks before she called him in to her assistance. Upon examining the part, he observed a kind of small schirrious cord, about six lines in length, where the puncture had been made; the tumour extended from the lower part of the arm as far as the wrist, and many hard lumps were felt along it. The patient told Mr. Bourquenod, that she felt very sharp pain whenever any one offered to move her arm. Emollient cataplasms and other remedies had already been applied, without success. Mr. Bourquenod ordered a liniment of sweet almonds, laudanum, and spermacei, and over this a cataplasim of bread and *Vegeto-mineral Water*; the patient found immediate ease. She continued this remedy for eight days successively, taking care to renew

EXTERNAL INFLAMMATIONS.

renew it twice in four-and-twenty hours ; at the end of which all the bad symptoms disappeared, except some little hardnesses, and a slight pain ; which were removed in twelve days, by a plaster made of wax, human fat, a little camphor and Vegeto-mineral Water.

OBSERVATION XIX.

Communicated by Mr. GAUTIER, a Master Surgeon.

I SAW a person troubled with so violent an ophthalmia, that the inflammation spread itself over all the neighbouring parts of the eye, and had all the appearance of an approaching gangrene. This disorder, which had hitherto baffled all medicine, at last yielded to the application of the Vegeto-mineral Water.

OBSERVATION XX.

Communicated by the same.

I WAS sent for to a patient afflicted with an œdematos tumour on the lower eye-lid, as big as an egg, and turned outwards. The swelling had seized the whole check, and the eye-lid was as transparent as glass. The application of the Vegeto-mineral Water, for one night only, considerably diminished the swelling, and in a few days the patient was cured.

OBSERVATION XXI.

Communicated.

MR. CONSTRISSI, surgeon of Cette, had a daughter afflicted with an ophthalmia in both eyes. The humour was so sharp that it brought an inflammation

mation on the adjacent parts. Upon his consulting me, I sent him some of the Extract of Saturn; and with it the method of using it. The following is his account of its effects: "Your Extract, Sir, has had a surprising effect on the face and eyes of my daughter since the day before yesterday; one must own its superiority, as a remedy. My daughter since the use of the Vegeto-mineral Water has opened her eyes, which she could not possibly do before; and I hope this remedy will take off the web which remains."

OBSERVATION XXII.

Communicated.

THE favourable accounts which Mr. Solignac gave Mr. Bounhiol, one of the oldest physicians belonging to the army, of the effect of the Extract of Saturn in ophthalmies, induced this physician to prescribe it to the Prior of the Benedictine Monks of St. Thyberi, who was afflicted with an obstinate ophthalmia: our medicine in a short time conquered the disorder.

I cannot help remarking, that this physician, who is an inhabitant of Valros near Pezenas, has done me the honour of assuring me, that ever since he has been acquainted with my Extract, he has successfully used it on many occasions.

OBSERVATION XXIII.

Communicated from La Rochelle.

MR. DELAN, surgeon-major in the army, informed me, that a frere of his frequently made use of my Extract with great success; at the same time gave me an account of a cure which he had made on an officer of Briequeville, who had been troubled with so violent an ophthalmia, for two months successively, that he could not bear the light.

No remedy had been left untried: frequent bleedings in the arm and foot, repeated baths, different collyriums, and every thing that could be thought of, had proved unsuccessful. In this situation Mr. Delan saw him: he made use of the Extract of Saturn with so much success, that in a short time, to the no small astonishment of the Faculty, who before had prescribed to him, and of all the officers of the garrison, the said gentleman was freed from the indisposition he had so long laboured under.

O B S E R V A T I O N XXIV.

A C H I L D of this town had been troubled for eight months with an ophthalmia, and a small web on the transparent cornea, which made light insupportable. Every remedy was tried, that was judged proper for the disorder, unsuccessfully. A constant application of the Vegeto-mineral Water performed the cure in eight days.

O B S E R V A T I O N XXV.

A D A U G H T E R of Mr. Rivat, merchant at Montpellier, was afflicted with a violent ophthalmia which made light insupportable: she was soon cured by the application of my medicine. This lady's father cured a person afflicted in the same manner with the same remedy.

O B S E R V A T I O N XXVI.

M R . H E N R Y, student in surgery, nephew to Mr. Roger, first surgeon to his royal highness Don Phillip, was troubled with an ophthalmia in both eyes; which was sometimes so troublesome, that he was unable to prosecute his studies. After trying many remedies without success, he came to me for my advice: I ordered him my medicine, which succeeded to his wishes.

OBSERVATION XXVII.

MR. SAINT PAUL, surgeon-major of the hospital at Ostend, informed me that he had used with great success the Extract of Saturn for the cure of all kinds of ophthalmia, even the most malignant.

OBSERVATION XXVIII.

THE surgeon-major of Brabant has written from Spain to acquaint me, that every ophthalmia which he undertakes, he cures by means of my Extract.

OBSERVATION XXIX.

A DAUGHTER of Mr. Valette, counsellor at law, was afflicted with so violent an ophthalmia in both eyes, that she ran great risk of losing them. I ordered my Vegeto-mineral Water to be applied, of which she soon found the good effects; being in a short time able to open her eye-lids, and was perfectly cured.

OBSERVATION XXX.

A WOMAN of Antibes, who suffered much from a malignant ophthalmia, which had seized the globe of the eye, the eye-lids, and adjacent parts, consulted me. This disorder had long baffled the skill of the Faculty of this town and neighbouring parts; notwithstanding which, a proper dose of the Extract radically conquered this disorder in a week's time. Though I had frequently been witness of the good effects of this remedy, I could not help being surprised at the sudden cure it performed; which astonished much more those of the Faculty who had before seen her in so deplorable a situation.

OBSERVATION XXXI.

Communicated by Mr. REGIS, a Surgeon of this Town.

I MET one day a Jew, who had an oedematous tumour on the lower eye-lid of his left eye, which was turned outwards, and transparent; this tumour had seized the whole cheek of that side. I applied that night the Vegeto-mineral Water, and the next day he was cured.

OBSERVATION XXXII.

IN the year 1747, Mr. Plantade, aid-de-camp to the Count of Choiseul, was cured at Genoa of an ophthalmia in both eyes, of two years and a half standing, by means of the Vegeto-mineral Water.

OBSERVATION XXXIII.

A MENIAL servant, belonging to the duke of Richlieu at Genoa, had so violent a disorder in his eyes, that it was apprehended he would lose his sight. He was cured by this medicine.

OBSERVATION XXXIV.

Communicated by Mr. COULAS, M. D. of the Royal Society of Montpellier.

I WAS afflicted with a violent ophthalmia: the symptoms of the inflammation were so considerable, and the pains I felt so great, that the most approved anodyne medicines afforded me no relief. Neither the mucilage of the seeds of psilium, apples boiled in milk, the white of an egg beat up with allum, oriental saffron, or any other remedy I made use of, procured me the least ease. Finding that anodyne medicines were ineffectual, I had recourse

recourse to astringent and resolutive ones; but still in vain. Taught by my own experience how little the most approved ophthalmic remedies were to be relied on, I had at last recourse to Mr. Goulard's Extract of Saturn. I had not applied it long, before I found myself quite relieved. The pains which tortured me before sensibly diminished, as did likewise the inflammation; the volume of the tumeſed vessels of the cornea was much lessened. Surprised at the extraordinary efficacy of this medicine, and scarcely giving credit to its amazing and immediate powers, I was determined to discontinue its use, to see what would be the event. But in a short time I was obliged to have recourse to it again: for soon after its difuse, the inflammatory symptoms returned with their former violence. I again tried to calm them by the applications I had made use of, previously to those of Mr. Goulard's; but to no purpose. This determined me to have again recourse to the Vegeto-mineral Water. I often repeated these experiments, and the result of them was always the same. In fine, this remedy, conjointly with other general ones, compleated my cure.

OBSERVATION XXXV.

Communicated by the same.

I PRESCRIBED the remedy to one of my brothers afflicted with the like disorder. Thinking it useless to try any other ophthalmic remedy, I advised that which had succeeded so well with me. But I was still desirous, by a variety of experiments, more and more to ascertain its powers. Both my brother's eyes were much inflamed; but one considerably less than the other. Upon this I applied a compress dipped in rose and plantain-water; and upon the other the Vegeto-mineral: in three days time,

time, the eye treated with the Vegeto-mineral Water, though the most inflamed, was perfectly cured; but the fate of the other was far different; which still continued in its former situation, till relieved by the other application. From hence, I think, it plainly appears, that both my brother and myself are indebted to this medicine for a cure.

O B S E R V A T I O N XXXVI.

I HAD the honour of being sent for, when at Paris, to a lady of distinction, who had a violent inflammation attending the kernels of the neck, the palate, and its roof, with a fever. She was extremely averse to bleeding. I ordered her a gargle of Vegeto-mineral Water, with a few drops of brandy. This immediately gave her ease, and, without any other application, radically cured her in three or four days.

O B S E R V A T I O N XXXVII.

Communicated by Mr. ESPINAS, Master of Arts, and Professor of Surgery, a Confrere of mine.

I WAS sent for to a lady who had a violent inflammation in the kernels of the neck, and neighbouring parts: the pains were considerable, and extended from the corners of the lower jaw, even externally: she had not only great difficulty in swallowing, but even in opening her mouth: both her eyes and face were much swelled: her voice was very faint, and her fever ran high. Bleeding every four or five hours was prescribed without effect; as were likewise lohocks, gargarisms, embrocations, emollient and anodyne plaasters. The bad symptoms hourly increased, and her life was thought to be in imminent danger. In these

these alarming circumstances, I did all I could to force open her mouth; which I was at last obliged to do with a speculum oris. This enabled me to touch one of the kernels, which was much swelled. I opened it with a proper lancet, and upon its discharging a great deal of pus, she found herself relieved; the other kernel, which was equally suppurated, was likewise opened. A gargarism of the Vegeto-mineral Water daily advanced the cure, and at last compleated it: but in a very short time after, the disorder again returned. Having observed the good effects before of the Vegeto-mineral Water, I prescribed it with equal success a second time; and in three or four days my patient was perfectly cured.

OBSERVATION XXXVIII.

Communicated by the same.

A SISTER of the above lady's was seized about the same time with the same disorder; she asked me for the remedy that had succeeded so well with her sister; this in a few days removed her complaint.

N B. These ladies before were very subject to sore throats; but, since the use of this medicine, have been entirely free from them.

OBSERVATION XXXIX.

Communicated.

I CURED at Marseilles, in twice four-and-twenty hours, a considerable inflammation of the scrotum, by the application of compresses dipped in the Vegeto-mineral Water, which I renewed when dry: I have made use of this Water with very great success in the curing of ophthalmia.

O B-

OBSERVATION XL.

Communicated.

AN inferior surgeon of the Royal Hospital was sent for to a woman of this town, who was troubled with an erisipelatous inflammation in her right breast; it had been fixed there for a month, and was owing to her lying-in. An insomnium and fever were the consequences: her breast was very much swelled, and very hard: the ill-chosen remedies, which had been before applied, gave rise to an abscess, which of itself had burst in different places. The young surgeon forbid the use of emollients, and substituted in their room cataplasms made with the Vegeto-mineral Water. The wounds were dressed with the pomatum, composed of the above water, wax and oil. This method was regularly pursued three times a-day. The patient almost immediately found ease, the swelling grew softer, the inflammation dispersed, the wounds cicatrized, and in a very short time the cure was compleated.

OBSERVATION XLI.

THE bishop of Montauban was seized in the year 1753 with a violent inflammation in his leg. The redness and pain were very great, and the skin was covered over with a number of little bladders, full of a reddish water. Mr. Haguenot, counsellor at law, and professor of the university, was sent for. He desired I might be consulted. This gentleman was witness of the immediate relief my medicine gave the patient; for in a short time this respectable prelate was able to go abroad, and in eight days to perform his ecclesiastical functions.

OBSERVATION XLII.

Communicated by Mr. DELPUECH, M. D. at Montpellier.

SISTER BLONDEL, of the Royal Hospital of St. Hippolitus, of this town, had a considerable tumour on her right knee. It extended itself half-way up the thigh, and to part of her leg. For five days successively her pains were so great, that she could get no rest. Upon my seeing her, she informed me that they had advised her to make use of bittern's fat; which for two days had afforded her some relief: but the third and fourth day, the inflammation was considerably encreased, and her pains became almost insupportable. I immediately ordered a poultice of bread and Vegeto-mineral Water; my patient slept well that night: the next morning the inflammation was abated, and the pains left her. The parts are very little swelled, and have recovered their former tone and action. I have discontinued the use of the cataplasms, and substituted compresses dipped in the Vegeto-mineral Water and a little brandy. This disorder had much the appearance of an inflammatory rheumatism.

OBSERVATION XLIII.

Communicated by the same.

A WOMAN had been afflicted for two months with a considerable ophthalmia in both eyes; the eyelids were turned outwards; no remedy which had hitherto been applied could subdue the inflammation. Frequent bleeding, and cathartic medicines, as well as a cooling diet, had been ineffectually prescribed. Sister Blondel gave her a botele of the Vegeto-mineral Water; which she made use of. In four-and-twenty hours the inflammation was abated, and from the fifth day the patient was cured.

OBSERVATION XLIV.

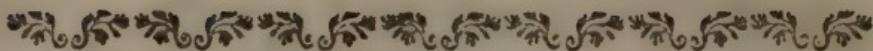
Communicated by the same.

I W A S sent for to a lady of this town, who had a very painful tumour on her left heel; I ordered the above Cataplasin, which succeeded to our wishes.

OBSERVATION XLV.

*Communicated by Mr. ***, a Student in Surgery.*

In the year 1751, I was afflicted with a violent ophthalmia, and a tumefaction of the carunculæ lachrymales, with a relaxation of the musculi elevatores of the eye-lid: this caused an involuntary weeping; and the humour which distilled from the part was so corrosive, that it brought on an eripelatous tumour on the adjacent parts of the eye. I applied, in consequence of this disorder, after losing some blood, the white of an egg, dissolved in plantain and rose water; thinking this proper to assuage the pain, and repel the humour which caused the complaint; but all these remedies had no effect. Finding my disorder too stubborn for common applications, I made use of Mr. Gouillard's Mineral Water. I had not long applied it before I experienced its good effects, and the fourth day I was perfectly cured.



C H A P. : II.

Of Contusions, Burns, Gun-shot Wounds, and the Action of the Extract of Saturn against these Diseases.

THE diseases of which I now propose to speak are very common; especially in the army; for the preservation of which I am obliged, by my station, to be particularly interested; and to this end I principally composed this Work. Now as these disorders continually happen, so ought we to be continually employed in finding out remedies proper for subduing them. But lest so many different subjects should not be clearly understood, by giving a detail of them in one Chapter, I shall divide it into three Sections. The first shall treat of Contusions, the second of Burns, and the third of Gun-shot wounds.

S E C T. I O N . I.

CONTUSIONS, which pathologists rank among the solutions of continuity of the soft parts, are external injuries, occasioned by the action of an obtuse body, which strikes or squeezes more or less violently any soft part of our frame; or by a similar action of the part

part against this body, whether the contusion is followed by a haemorrhage, or whether the blood is simply stagnated in the part contused.

The following essential differences are to be remarked : 1. The vessels of the part contused sometimes remain entire, though they have lost their tone ; from whence arise swelling and distension. 2. At other times when the action or blow has been more considerable, or some small blood-vessels are ruptured, the blood appears extravasated under the skin ; from thence proceeds an echymosis, or extravasation of blood. 3. The third species of contusion is attended with a rupture of more considerable blood-vessels, a great effusion of blood, and often without an external wound. 4. In fine the vessels may be burst, the flesh lacerated or tore ; and this is the case of contused wounds.

The two first species of contusions are generally cured by resolution ; the third often terminates in suppuration ; as does likewise the fourth, which sometimes ends in a gangrene.

The fatal effects of contusions are more frequent than is commonly apprehended. When they are large and deep, they often degenerate into sordid ulcers, which are difficult to cure. When they lie over a considerable artery, they give rise to an aneurism or swelling therein, which may shew itself some time after. Cancerous tumours too

frequently follow contusions of glandular parts; for example, of the breast: a contusion which injures the periosteum often induces a caries: contused nerves occasion palsies: what dangerous symptoms have been observed to follow contusions upon the head, breast, and lower belly!

But to confine ourselves to such as only affect the external parts, we know some to be slight, and easily cured; while others are attended with distressing and dangerous symptoms. In both the one and the other, there is no application whose effect is so sure and expeditious as the Vegeto-mineral Water, warmed and applied by compresses to the part affected; taking care to moisten them from time to time. When the parts are lacerated, the wound is to be dressed with the Cerate of Saturn of which we shall speak in this Work; but care must be first taken to wash them with the Vegeto-mineral Water.

In these disorders we have been speaking of, our application will certainly be preferred to all others, if people will only reflect, that contusions which occur in daily practice, even after an echymosis, are dispersed by its assistance alone in a few hours time. This I have often experienced myself, and every one is at liberty to make trial of it with equal success.

With regard to the action of the Extract of Saturn against contusions, the reader may refer to what has been said in our Introduction, and the preceding Chapter, on the properties of

of the metallic parts of Lead, and on their powers of passing through the pores of the skin, and of removing the obstructions, tumours, and concretions, they meet with. The following Observations will help to prove what I have advanced in this section.

O B S E R V A T I O N I.

A PAGE of the Duke of Richelieu had an inflamed testicle, owing to a bruise he had received in riding. Many remedies had been prescribed without success, and the disorder continued to gain ground. Upon seeing him, I ordered compresses of the Vegato-mineral Water to be applied to the part; which soon gave him ease. The day after, the pains were entirely abated, and in eight or ten days the cure was compleated.

O B S E R V A T I O N II.

A GIRL, about ten years old, fell between some coach-horses legs. She had received so considerable a contusion on her arm, fore-arm, hand, back, and thigh, that the surgeon who was called in, thought her life in danger. A confrere of mine, who was sent for before me, applied vulnerary water to the parts, which caused considerable pains, as it did a fever. I was desired by a charitable lady to go and see the patient: I ordered my liquor to be applied, which immediately gave her ease, and in eight days time she was cured.

O B S E R V A T I O N III.

Communicated.

MR. MECUFF, apothecary, shewed Mr. Labori, a confectioner of mint, a contused wound on the

the great toe of the right foot, which had been occasioned by the fall of a large piece of wood. As a cataplasm of marsh-mallows had been already applied without success, he ordered one made with our remedy. The same day the pains were much abated, and in two or three the patient was cured.

OBSERVATION IV.

Communicated.

MR. DIDIÉR, surgeon-major of the Royal Corsican Regiment of Dragoons, saw, at Antibes, a captain of militia, who had the great toe crushed by a cart-wheel. He informed me, he had made use of no remedy but mine, having previously blooded the patient. In a fortnight's time he was cured.

OBSERVATION V.

Communicated by Mr. Delon.

A SOLDIER, passing near a bee-hive, was stung by the bees, who lodged themselves in his hair. He hurried to me, and desired I would give him immediate assistance; telling me at the same time, if it was not in my power so to do, that he would be glad if some body would put an end to his life, seeing that it was become insupportable, through the excessive pain he felt. I applied immediately compresses of the Vegeto-mineral Water, which I took care to wet every quarter of an hour. My patient found himself relieved in less than an hour, and the next day he was cured.

OBSERVATION VI.

Communicated by the same.

A DRUMMER's wife, of the regiment of Bresse, had a considerable contusion on one of her cheeks,

checks by a fall from a cart. I immediately applied a compress dipped in the Vegeto-mineral Water, and in four days time she was perfectly cured. Mr. Delon adds, that her husband had very much bruised one of his ankles, and that upon applying a compress of the Vegeto-mineral Water, he was very soon cured.

OBSERVATION VII.

IN the autumn of the year 1758, during my stay in the country, I saw a child, who had passed before a bee-hive, where they were taking honey. Both his face and head were much stung, and his situation was very distressing. I applied the same remedy, and he was cured in a short time.

OBSERVATION VIII.

SOME years ago a countryman fell from the top of a wall: he was carried home very much bruised, and unable to move without considerable pain. He had been attended for two days by a surgeon; but neither himself or friends thought the applications answered their expectation. They had then recourse to a physician of Montpellier, who had been often witness of the efficacy of the Extract of Saturn in bruises: by his desire I sent him some of it, and informed him how it should be used upon the occasion. I have learned since, that in a few days after, the bruises and bad symptoms disappeared.

OBSERVATION IX.

Communicated.

I HAVE experienced the admirable effects of the Extract of Saturn against bruises, in many voyages at sea, where the sailors are often exposed to these accidents.

OBSERVATION X.

MR. LA GARDE, valet-de-chambre to the Chevalier de St. Priest, by a fall from his horse received a contusion on his breast and fore-part of the shoulder. Lavender water and brandy with soap were applied to the part; and then a plaster, which remained there for above six weeks; upon the falling off of which, many red spots were perceived upon that part, and the adjacent ones: they were become of the tetter kind, and caused a considerable itching. Upon his calling on me, I gave him some *Vegeto-mineral Water*, which cured him in a fortnight, though he applied it only twice a-day.

OBSERVATION XI.

*Communicated by Mr. ***** , Student in Surgery.*

ON June 14, 1756, walking along the Mall, I received a blow from a ball, on the gastrocnemii and solar muscles. The blow was so violent, that it caused the rupture of a great many vessels, and consequently a contusion and echymosis. As soon as ever I got home, I applied a cataplasm of the *Vegeto-mineral Water* and white bread; and in three days time I was perfectly cured.

SECTION II.

THE name of Burn is given to the change of the human body which follows the applications of fire. This change consists in the sudden destruction of the vessels of the burned

burned part, and in the extravasation, coagulation, and dissipation of the humours.

Burns are not only effected by contact with real fire, as that of a flaming hot coal, but also by contact of substances solid or fluid which contain a great quantity of fiery particles; such, for example, as hot iron, boiling oil, water, gun-powder, &c.

The symptoms of burns are reduced nearly to those of inflammation; but a great difference is to be observed in their degree.

1. Sometimes the action of the fire does not reach deeper than the cuticle, and mucous substance below. In these slight Burns, a number of blisters arise on the part, become red, and occasion an itching sensation; and by the separation of the epidermis from the skin, the extremities of the nerves are left naked. Pain now commences, and often with some degree of intenseness; but all these symptoms vanish in a short time, and Nature effects a cure by renewing the outward skin.

2. A Burn becomes more considerable, if the action of the fire has penetrated to the skin and fat; for then heat and pain are highly increased, together with a dryness and hardness of the burned part, which is immediately covered with little vessels, filled with a yellowish humour.

3. In the most violent burns, not only the epidermis, the skin, and fat, are destroyed, but the membranes, muscles, vessels, and

58 A TREATISE ON LEAD.

even the bones themselves are consumed ; and in the place of the live parts, there remains a black insensible slough ; in a word, a dead mass.

It is easy to conceive, and experience sufficiently proves, that the effects of burns vary according to the diversity of causes. Boiling oil makes more considerable impression than boiling water. A burn from pitch or rosin is still more to be feared. Red-hot iron, which touches gently, as it passes the body, leaves less traces than when it is strongly applied for a considerable time : aqua-fortis, gunpowder, different species of caustics, produce different burns.

It is essentially necessary to remark the nature and extent of the parts of the body which have suffered from fire ; for it is evident that the danger is more or less great, according to the structure and use of the parts burned, and the more or less space such parts occupy. The temperament and constitution of the patient ought also to weigh with us, in forming our opinion of those diseases. In general, the deeper the burn, the more is to be apprehended from it.

The remedies against burns are extremely numerous. Every one, if I may so speak, has one peculiar to himself : but without entering into a superfluous detail, I will only mention the admirable effects of the Preparations of Lead in burns. Before the Extract of Saturn was known, I have seen able sur-

geons

geons make use of an ointment of Lead with great success on these occasions. I myself had occasion to use it happily for Mademoiselle Sybille, who had a considerable burn on her face and neck, to which one of my colleagues had made applications before, which irritated the parts so much as to bring on a violent fever: I applied the Ointment of Lead, which instantaneously assuaged the pain, and completed the cure in a short time.

Our method of cure in these complaints is very simple; it consists in the application of compresses dipped in the Vegeto-mineral Water, on the part which is burned. If the outward teguments remain unbroken, we need only keep the compresses constantly moistened with the above water; if the burn is deeper, if the teguments are injured, and there is a wound, little pieces of fine lint may be applied, covered with the Ointment, of which we shall give an account in the Formulae; taking care to cover the whole with compresses dipt in the Vegeto-mineral Water, which must be moistened from time to time. By this means of proceeding, the pains are not only immediately calmed, but the disease radically cured.

O B S E R V A T I O N I.

Communicated by Mr. MENURET, M. D.

A CHILD of twelve years of age had his arm, fore-arm, and the right side of his breast burnt, by some

60 A TREATISE ON LEAD.

Some scalding broth, which a servant had let fall upon him: the parts became of a shining red; the pains were as great, as the smarting was insupportable. Having examined the patient, I immediately sent for the Extract of Saturn; but, in the meantime, ordered the parts to be fomented by compresses dipped in vinegar and water, which contributed a little to ease the pain. Upon getting the Extract, I soon made the Vegeto-mineral Water, with which I continued to foment the parts till they were healed; which was soon after the application.

OBSERVATION II.

Communicated by Mr. SOLAYRES, Student of Physick.

MR. SOLAYRES, during the vacation, whilst he was at his own house, near Cahors, informed me, that he had cured a man, with my remedy, who had been burnt by boiling water. He adds, that nothing had been able to calm the violence of the pain, but the Vegeto-mineral Water, which instantly had the desired effect.

OBSERVATION III.

*Communicated by Mr. DE SAINTE COLOMBE,
Surgeon at Toulon.*

SOME days ago, I was burnt in the leg with hot greasy water: the accident was soon followed by an inflammation. I applied different remedies to abate the bad symptoms; as, the cerate of Galen, &c. but ineffectually. At last, having remembered, during my stay at Toulouse, in the house of Mr. Taillard, major-surgeon of St. James's Hospital, that he frequently made use of the Extract of Saturn with very great success, I mixed some

of

of it with common water, which, after three or four applications, cured me. I can also assure you, that I have seen surprising effects from the bougies of M. Goulard, on the patients of the said hospital, and upon a man of fortune in the city of Toulouse, who had tried before, those of Mr. Daran; which he did not find answer so well as these, of which I have heard many eminent in the profession, especially Mr. De La Pougade, speak with the greatest encomiums.

These few Observations, added to those which treat of Burns caused by gun-powder, in the next Section, may appear sufficient to induce at least the practitioner to try the efficacy of the Extract of Saturn against Burns: its use is not so much to be dreaded as that of astringent and stimulating remedies; nor are there the same inconveniences attending it, which result from emollients, from plaisters which are termed desesors, from black soap, and many other topics; whose bad effects, to my great surprise, have not engaged the masters of the art to seek a more efficacious remedy,

S E C T I O N . III.

THERE are few subjects in surgery which merit more attention than such as treat of gun-shot wounds. By these wounds are understood such as are made by a ball, or any other hard body, forced from the cavity of fire arms by the explosion of gun-powder.

The

The bad effects of wounds from fire-arms may be considered in three different points of view. 1. If any part of our body is injured by an explosion of powder, nothing but a burn will ensue, which will be more or less violent, according to the quantity of powder exploded, the force with which it has struck and penetrated the parts, and the extent and nature of the parts burnt. 2. Balls, or any other body, sent out of fire-arms, do not always cause wounds, but sometimes only contusions, which are in general much to be feared, whether they are considered only in themselves, or with respect to the shock and commotion, which are often communicated from the contused part to the whole frame. 3. The violence with which fire-arms expel the solid bodies pent up in them, may enable us easily to comprehend why the wounds which follow them are so frequent. A view alone of these wounds is sufficient to prove how dangerous they are in their nature: their lips and surface are not smooth and uniform, as in those made by a sharp instrument, but the flesh is bruised, unequally tore, and jagged. But it would detain us from our present subject, to give a long detail of the difference, symptoms, complications, and effects of these diseases.

Now it is very certain, that nothing is less fixed, or more undecided, than the methods which have been and are now used in the treatment of gun-shot wounds. Some, as

Mr.

Mr. Ranby, an English surgeon, recommend softening with oil the first dressing; others, which is much the same, use emollient cataplasms. This is the general method, when they are attended with inflammation. Some make use of aromatic wine, when there is a contusion and tumour: a practice which sufficiently agrees with the indication which ought to be fulfilled. Others, again, make use of spirituous medicines, which may be of service when mixed with other ingredients; but which, I believe, are always injurious when applied alone, even in case of a mortification.

I would not have spoken so decisively against the bad consequences of the common practices of treating this species of wounds, had I not been well convinced of them. It is one of the most interesting points in surgery, which we should by no means overlook, by suffering ourselves to be misled by former practice, instead of considering how to improve upon it.

The infallibility of the good effects of the Extract of aturn will secure the practitioner, who shall prescribe it in the treatment of gunshot wounds, from the errors which attend the other methods hitherto adopted on the like occasions; for I am not afraid to assert, that in a short time after the application of this medicine, the accidents usually attending these complaints, such as inflammation, swelling, &c. will be diminished. I am also

also thoroughly persuaded, that by a proper attention in the application of our medicine, the cure of many gun-shot wounds might be effected, which are ranked amongst those which require amputation. However, I do not pretend here to speak of such as are caused by violent shocks, and attended with a loss of substance in essential parts, injuries of the bowels, &c.

What a considerable loss do his Majesty's troops suffer, by the non-application of this Extract, both in the field and hospitals, where the wounded swarm! We have neglected nothing to make it public; and the most favourable experiments have justified our opinion: yet by an inconceivable infatuation, its use is by no means so general as it ought to be. Why have not modern authors, who have written *ex professo* on gun-shot wounds, and the manner of treating them, had candour enough to acknowledge the insufficiency, or rather the danger, of the most generally received processes? If they would only take the trouble to make trials of our application, the good effects of which we cannot sufficiently extol, perhaps they would be forced to declare in its favour.

OBSERVATION I.

THE Bishop of Castres, who has made use of my remedy for many years in his diocese for the poor, has done me the honour to tell me, that a man, who had his whole body burnt with gun-powder,

powder, from the intense pain, threw himself into a river; but he was scarcely come out again, before the pains returned upon him with great violence. When all other remedies had been made use of without effect, this prelate caused compresses of the Vegeto-mineral Water to be applied to the part. He was immediately freed from his sufferings, and cured in a few days. This same gentleman likewise informed me, that he had prescribed this remedy with the same success to one of his domestics, who had by some accident burnt his leg.

OBSERVATION II.

*Communicated by Mr. SOULIER, Surgeon-major,
of the Regiment of Bigorre.*

A CORPORAL was burned with gunpowder, from the head to the epigastric region. The two superior extremities had likewise suffered, and his face was so disfigured, that he could not be known. He was bled as often as is usual on such occasions, but nothing was applied except the Vegeto-mineral Water: he was regularly dressed three times a-day, and I took care to keep the compresses moistened with the above water. In five-and-twenty days my patient was cured without any ugly scar.

OBSERVATION III.

A PROTESTANT Minister, who had received a pistol-shot on the superior part of the fore-arm, was conducted to the Citadel of this town. He was attended by Mr. Vatre, master-surgeon at Paris, and surgeon-major of the Norman regiment, who were unanimous in applying compresses dipped in the Vegeto-mineral Water to the part, thinking this method would be the most efficacious

cacious to subdue the inflammation, and prevent a return of the hæmorrhage, which was to feared; this being accordingly done, the inflammation was abated before the next morning; and on the fourth day my patient was in a fair way of doing well.

OBSERVATION IV.

THE son of Mr. Cavalier, a lawyer of this town, had part of his face burnt by a rocket. The eye was so much affected, that he was in danger of losing it. I applied the Cerate of Saturn to the part, and compresses of the Vegeto-mineral Water over the whole. Soon after, the swelling abated, and the tenth day my patient was so recovered, that there was not a single grain of powder to be discovered in the skin.

OBSERVATION V.

Communicated by Mr. DELON, Surgeon-major of the Regiment of Bresse.

A GUNNER, during the time he was ramming a cartridge into a cannon, was so unlucky as to have the powder take fire; and being at the mouth of the piece, he had half the fore-arm and hand burnt. The shock was so great, that he lost all sensation in the part. I contented myself with ordering the arm to be continued in a bath of the Vegeto-mineral Water, and some spirits of wine, for six hours successively. The day after my patient was dressed with the Cerate of Saturn, and in fourteen or fifteen days he was cured. N. B. Previously to my applying the Cerate, I covered the part with compresses dipped in the above Water.

OBSERVATION VI.

Communicated by Mr. BRUGUIERE, of the Regiment of Tour du-Pin. .

A N officer of the Crown Regiment was wounded at the affair of Crevelt, by a ball, which entered the middle and external part of the arm, and came out on the other side, without injuring the bone. Every thing that is usually done on the occasion was done for him. It was his lot to fall into my hands, and I cicatrized both wounds in a short time, by the application of the Vegeto-mineral Water. A comrade of his, who lay in the next bed, and was under the care of an assistant-surgeon, had the same kind of wound ; but seeing his yet remaining open, petitioned to have privately given him some of that excellent white liquor, which had contributed to cure his comrade in so short a time. I refused it, lest it should come to the knowledge of the assistant-surgeon, who certainly would not have thanked me : however, through compassion, I ventured to give him some of it, which he made use of every morning, after his usual dressing. He was cured in twelve days.

OBSERVATION VII.

On the Cure of a Fistulous Ulcer, in consequence of a Gun shot Wound. By the same.

ONE REJOUI, serjeant of the Regiment of Chartres, received a wound with a ball on the upper and external part of the thigh, which entered the scrotum, and came out two fingers from the great trochanter, without injuring the bone. About six weeks after this accident, he was brought

brought to the Hospital of Andernast, where I attended him. I found that the wound, which had been made by the entry of the ball, was become fistulous. I asked the patient, whether injections had been made use of? He informed me, that the wound had often been injected with barley water and honey of roses. From thence I resolved to inject some of the Vegeto mineral Water, which I composed myself. After the fourth injection, there came out a piece of his breeches cloth, and the day following the wound was cicatrized. I saw the patient on his return from the baths, three months after, and he informed me, that the wound had never broke out.



C H A P. III.

On the Use of the Extract of Saturn in External Suppurations, and particularly in Abscesses and Ulcers.

WE now come to Suppurations; diseases which are as common as they are often fatal. We understand by external Suppurations, all those which, by signs, denote that one or more parts of the body has suppurated, whether the pus is still concealed, or whether it discharges itself. This furnishes surer grounds for our diagnostic.

The skin, muscles, and, above all, the fat, are the principal seats of external Suppurations; but they often attack other parts that

that are susceptible of inflammation, such as are the membranes, aponeuroses, tendons, periosteum, &c.

The Suppuration of every part is generally preceded by a greater or less degree of inflammation; and by this, chiefly, is a judgment to be formed of the violence of the Suppuration.

Although it has been said, with a great deal of reason, that Suppuration is the work of Nature, it is not less true, that it may be retarded or promoted by art, according to the choice which is made of the medicines proper for the occasion. This choice is not so indifferent as is generally imagined, and often gives rise to many inconveniences. This subject being so very important, requires our particular attention.

Emollients, on which we sufficiently dwelt in speaking of Inflammations, are adopted by practitioners with at least equal inconveniences, in the greater part of threatened suppurations. They tread the beaten path, from which they think it unsafe to depart; but a closer examination will prove to us the insufficiency and the danger of these emollient applications, in the case now before us.

But to attempt to persuade the generality of Surgeons not to overwhelm, if I may so speak, an inflamed part, which tends to suppuration, with relaxing and ripening cataplasms, is to speak a language entirely contrary to their ideas. But what will they say, if

if I demonstrate to them, that without any opening, the purulent matter confined in the abscess may be carried off by resolution and transudation; I do not hesitate to publish these facts, though in appearance very surprising, because they are confirmed by innumerable experiments. It may therefore be looked upon as a truth, that the Extract of Saturn, applied in its different forms on the suppurated part, penetrates to the matter, and by a very singular action causes, through the pores of the skin a discharge of pus, which is found upon the different dressings; by which means, without coming to any operation, the said pus is by degrees dispersed, and the patient perfectly cured. No other reason can be given for this phænomenon, than by admitting the metallic particles to have a peculiar power of dilating the pores of the solid parts which surround the matter, and so far attack and attenuate it, as to render it capable of passing through these pores. A point of this importance requires some attention in reiterating the experiments, which have so well succeeded with me; and we cannot doubt of the efficacy of this application in inflammatory cases not yet brought to suppuration, since it has been attended with such success in actual suppuration.

The view of the Surgeon, in dressing ulcers, ought to be, to reduce them to a simple wound; and this is attained by deterion: after

after which, ulcers, like wounds, want only a regeneration of flesh and skin. The object of our work is not to enter here into discussions, which are often fruitless, concerning the manner of the growth of flesh, and formation of skin; but stopping at something more solid, we will remark, that in the treatment of ulcers, practical surgery has very little uniformity. One uses the ointment of Galen, when the ulcer is recent and painful; others the balm of Arcæus alone, or mixed with basilicon: others, in fine, different ointments, digestives, plaasters, &c. Now it appears that the relaxing ointment, as that of Galen, blunts the action of the vessels, on which alone the cleansing and healing the ulcer depends; from whence follow proud flesh, ill-digested matter, &c. The other ointments, by a powerful irritation of the sound vessels, add too much to their active power; from whence follow inflammation, copious suppurations, and sometimes a mortification; or at least they considerably retard the cure.

If these different circumstances are seriously considered, we shall be convinced, that in treating ulcers and sores, the choice of medicines ought to turn upon such as increase the elasticity of the vessels without irritating them. This is the effect of the Extract of Saturn, which, if applied either as a wash or in the form of an ointment, as appears in the Formulae, presently alleviates the pain of the most

most sensible and malignant ulcers, favours their suppuration, renders fluid the stagnant humours in the obstructed vessels, and quickly brings the most obstinate ulcers to cicatrize.

What I have here advanced is founded upon a thousand Observations and Cures, that have been made both in our hospital and others. Besides, my practice is not very different from that of the hospital of La Charité at Paris; for Mr. Faget the Elder, a Surgeon of very great merit, assured me in the year 1751, that he constantly used in that hospital, for the dressing of sores and ulcers, the Tripharmacum ointment, whose basis is well known to be Lead.

I own, notwithstanding, that the effects of the most approved applications cannot correct a corrosive Suppuration in a patient whose blood is infected with a virus, against which the known remedies have little or no effect: For in these cases the gréale is melted, sinus's and burrows are formed. But even in these our metallic remedy excels all others, in calming and curbing the acrimony of the suppuration, in alleviating the cruel pains it excites, prescribing at the same time limits to its bad effect, and taking off the bad smell which is exhaled. Thus, though the evil itself is incurable, great benefit may accrue from its application.

I come now to the different methods that I daily follow, and have always followed, in

the

the dressing of ulcers, beginning with such as are simple and recent, and then going to those which are antient, callous, painful, putrid, stinking, and corrosive.

There is nothing more easy than the dressing of simple ulcers; I mean such as are occasioned by the opening of an abscess; for these we make use of washes of the Vegeto-mineral Water, and of injections of the same, when they are deep; we wet the pledges and first compress; and cover the former with the Cerate, as in the Formulae; we dress the sores twice a-day; and by pursuing this method, the disease is soon conquered.

It is not the same with old, foul, bleeding, horney, and fetid ulcers; they obstinately resist ordinary applications, and even the best prove useless, without the indispensable precautions we take in their treatment. If we attend to the nature of these ulcers, and their offensive and corrosive suppuration, we shall be able to judge of the difficulty of their cure; for if they are only dressed twice a-day, this corrosive suppuration destroys and devours, I may say in a few moments, the action of the most excellent applications. Having learned from experience, that the Extract of Saturn, mixed with common water and brandy, in the quantity that will be mentioned in its place, is not only sovereign in preventing putrefaction, cleansing, resolving, calming; but has the most singular virtue of blunting the acrimony of the most

bloody and corrosive suppurations ; I cannot think any other remedy can with equal success be applied to the cure of old ulcers. I dress with the ointment I have already mentioned, taking care to wash the ulcer with the Vegeto-mineral Water a little warm, with which the pledges and compresses are to be wetted, and to moisten every hour the bandages with the said water.

By following this method, I have not only cured the most obstinate and inveterate ulcers, but many others of the Profession have met with equal success, as will be seen in the Observations. But I must here anticipate an objection that will necessarily be made me, and of which I am sensible myself.

There are ulcers, which are looked upon as drains, by which the blood is purified ; and which give rise, when attempted to be cured, to a reflux of vicious matter into the mass, the consequence of which is much more to be dreaded than the ulcer itself. This difficulty, being founded upon experience, appears at first unanswerable ; however, I dare affirm that it makes nothing against the method which I practise. It is certain, in the treatment of venereal ulcers with medicines that have not an anti-venereal quality, we only obtain an illusory cure ; and though we make the ulcer disappear, we cannot eradicate the cause. It is equally certain, that irritating applications, repellers, and others of that nature, cannot contribute to heal old ulcers, without

without giving occasion to a reflux of vicious matter into the blood ; and I am well persuaded, that but a very little of the offensive and corrosive matter must produce the worst effects. But the reproaches which these remedies we have been speaking of so justly merit, cannot be given to our metallic one. It does not act by repulsion, nor does it occasion any reflux of matter, as it sets in motion the stagnated humours which choaked up the edges of the ulcer, and produces an external suppuration ; it gently stimulates the sound flesh, adds to its spring, and cleanses, at the same time that it blunts, the acrimony of bad suppurations. Thus the pains are abated, and all the bad symptoms, which generally attend malignant ulcers, which it effectually cures, by destroying the cause, which I suppose TO BE LOCAL. What I have here advanced is founded upon fifteen years experience ; so I think it may be depended upon.

However, I do not pretend to banish, in the treatment of ulcers, the general or particular remedies proper to destroy the virulence that may be found in the blood, and which is often the cause of bad suppurations. But in general it is worth while remarking, that old and callous ulcers are commonly produced by the neglect of some inconsiderable sore at first, or of some inflammation that had come to suppuration ; which by bad treatment often degenerates into an incur-

able ulcer. Now we are not afraid to assert, that our metallic remedy is as sovereign in these kinds of ulcers, as mercury is in the venereal disease; nor have we ever seen any bad effects from it. I thought this preamble necessary, to destroy ancient prejudices, which are so deeply rooted in mens minds, and which it is no easy task to remove. I now come to the Observations.

S E C T. I.

OBSERVATION I.

Communicated by Mr. ESPINAS.

MR. DURAND, a cutler of this town, went to Mr. Espinas, a pupil of mine, to assuage the violent pains of an ulcer, which extended from the middle of his leg to the lower part of the malleolus internus; an insupportable cadaverous stench issued from it, and the edges were hard, callous, and turned back; the whole was of a livid colour, bordered upon black: the patient had been troubled with it for forty years, during which time many surgeons had undertaken the cure. The violence of the pain did not suffer him to enjoy any ease day or night; he was incapable of any exercise, and never quitted his bed, but to be carried into his chair. Mr. Espinas, who had daily been a witness of the good effects of our remedy, in the Military Hospital, did not hesitate to make use of it. He dressed the patient after the manner already described; in three hours time the pain was abated, and in four-and-twenty hours gone off. The smell of the pus changed by degrees, and ceased to be offensive. In short, in less than two months

months, the ulcer was deterged, consolidated, and cicatrized, without any inconvenience to the patient; who is now as able to attend his business as ever.

O B S E R V A T I O N II.

ONE MEJAN, a servant, came to consult me about a scrophulous, sordid, and fetid ulcer, which he had under his right ear. I looked upon the ulcer as venereal, and, in consequence, ordered him to bathe it, and use mercurial frictions; which, instead of relieving, increased the disorder. This ulcer continued to corrode the adjacent parts; it penetrated to the internal part of the ear, and the cheek of the same side: he was dressed with our Cerate, and the Vegeto-mineral Water, with which the ulcerated part was washed many times a-day, over which compresses were laid wetted in the same. This remedy diminished the pain, but not the ulcer; upon which the patient was obliged to go to Bareges; from whence he returned, after a long stay, without being cured. Upon his arrival at Montpellier, he came again to consult me. I told him that my remedy was best adapted to his case, but at the same time, that great attention was to be paid to the dressings, which ought to be very frequent. By following my advice, he had the satisfaction of seeing the ulcer gradually diminish; and in six weeks time he was perfectly cured.

Since the writing of this Observation, many ulcers have appeared in different parts of his body, as upon the shoulder, neck, and head; in which part the bones are discoverable for a considerable extent. Our medicine always effected the cure of this evil, although unassisted by a regular regimen. It is true that a small ulcer yet remains, and many more are to be apprehended; but at the source of

the evil consists in a vicious state of the blood and juices, it will easily be allowed, that the credit of our medicine will by no means be hurt upon that account; since it has brought about, both in regard to this man as well as many others, every thing that could be reasonably expected from it.

O B S E R V A T I O N . III.

ONE ANTHONY FABRE, a soldier in the royal regiment of cavalry, came to the hospital in the year 1756, to be cured of two ulcers; one of which was seated on the posterior and middle part of his right leg, the other on the upper and internal part of his right hand.

These ulcers were of the most malignant kind, with very callous edges; and the suppuration was of so bad a quality, that it corroded all the neighbouring parts: that on the leg had destroyed part of the musculi gemini; and the one on the hand, the musculi interossei. The matter had penetrated through the hand; the flexor tendons of the fingers were laid bare; the patient suffered excruciating pains; and the whole was horrible to the eye. He told us, that such had been his situation for two years past, which gave reason to suspect that it proceeded from a scrophulous habit of body: many surgeons had undertaken his cure; and his pittance being spent in search of it, he resolved to get into the hospital.

I ordered him to be dressed according to my usual method: the ulcer was injected with our liquor, and the pledgets covered with the Cerate; the compresses, dipped in the Vegeto-mineral Water, were often moistened, and the dressings constantly changed twice a-day. In eight days there was a great change for the better; but the patient having given some reason to suspect, that they might have been produced by a venereal cause,

cause, I prepared him for the frictions by a proper bath. Before the use of the mercury, the cure was much advanced, and compleated before the mercury took effect. Many, who followed me in my visits, were surprised at this cure, and were no less so at the celerity with which it had been performed.

O B S E R V A T I O N IV.

MR. RYMBEAUL, purser to the King's ships, came to me in the year 1755, to be cured of an ulcer in each leg, with which he had been afflicted for twenty years past, and had hitherto been deemed incurable. These ulcers were of the malignant kind; their edges hard and callous, the suppuration very offensive; and the whole was attended with violent pains, an inflammatory heat, and tumefaction. I treated this patient in the same manner I had done the former, except the mercurial frictions; and I own should have been surprized with his cure, had I not been eye witness of the former. In six weeks he was perfectly well, and able to return home.

O B S E R V A T I O N V.

A SOLDIER of the regiment of Burgundy had been afflicted for seven years with an ulcer in the middle part of his leg. Its edges were hard and callous; he had been salivated without success; but by a methodical dressing, such as we have above described, the ulcer was perfectly cured in a very short time.

O B S E R V A T I O N VI.

A WOMAN with child had some considerable ulcers round the vulva, which caused insupportable pains, and no medicine could calm. Being well assured they were not venereal, I prescribed my medicine, which gave her ease, and performed the cure.

OBSERVATION VII.

A DRUGGIST of Genoa had an inflammatory ulcer on his leg, of a long standing. I cured him in eight or ten days by the use of my medicine.

OBSERVATION VIII.

MR. DUBRUEIL, lieutenant-colonel of the regiment of Belloy, desired I would pay a visit to the major of the same regiment, who had five scrophulous ulcers in his arm, attended with great inflammation. They had been dressed for several years, without alteration for the better. I undertook the cure of this patient, whom I treated as the former. He soon found ease: in ten days four of the ulcers were cicatrized; and the fifth, which was situated on the portuberance of the shoulder, was cured in fifteen.

OBSERVATION IX.

Communicated.

MR. BRUGUIERE, surgeon of Saumiere, has informed me by a letter, that after treating without success a scrophulous ulcer for three months successively, he at last very soon conquered it, with the assistance of my remedy.

OBSERVATION X.

Communicated.

MR. ROLLAND, surgeon-major of the regiment of Mailli, told me that he had cured in a short time, with my medicine, an ulcer, attended with a caries, which had originally proceeded from a whitloe, and had baffled the skill of many surgeons for nine months.

O B S E R V A T I O N . XI.

Communicated.

MR. SEGUI wrote to me from Spain, that he had by the same means cured the farmer-general of his Catholic Majesty of ulcers in his leg, with which he had been afflicted about twenty years, and which had disabled him from walking. Mr. Segui adds, that he had not only brought the above ulcers to cicatrize, by means of the Extract of Saturn, but had also been witness of the patient's making use of his legs, which he had not been able to do for many years past..

O B S E R V A T I O N . XII.

Communicated.

MR. REGIS, a surgeon of this town, saw a girl of nine years of age, of a very delicate constitution, who was troubled with a tumour on her neck, as big as one's fist. He made use of every remedy he thought was proper to disperse it; dreading its coming to suppuration, and leaving a fistulous ulcer; which is generally the consequence. But, notwithstanding his care, the tumour suppurred; and upon opening it, he discovered many ichirrhous glands. The ulcer could never be brought to cicatrize, upon account of the flesh, which was become flaccid and fungous. The matter it discharged was thin, and its acrimony brought an inflammation on the part. After two months dressing, two pustules appeared, which contained a yellowish corrosive fluid: the ulcer, whose borders were become callous, and like those of malignant ones, spread further. Bareges, lime-water, and every thing else, was made use of without success. This induced Mr. Regis to have recourse to the Extract of Saturn; which, in seven

or eight days, gave the wound a different aspect, and healed it in a very short time.

O B S E R V A T I O N XIII.

Communicated by Mr. DIDIER, Surgeon-major of the Corsican Regiment of Cavalry.

A SOLDIER, who had a carious ulcer on the leg, has been cured by the Extract of Saturn, after every other medicine which could be thought of had failed. Being well convinced that my patient had no bad humour in his blood, I put him under a proper regimen, and ordered him to keep his bed; I purged him from time to time, and took care to remove all the proud flesh from the sore, which I washed three or four times a-day with the Extract, modified according to the state of the ulcer; whose aspect was hideous, when I first undertook the cure. The officers, who had determined to discharge this man as one incapable of service, were witnesses of the cure, with no small degree of astonishment.

O B S E R V A T I O N XIV.

Communicated by Mr. BEGON, one of the principal Surgeons of St. Hippolitus's Hospital.

HAVING been witness, at the Royal Hospital at Montpellier, of the surprising effects of the Extract of Saturn, I thought a proper opportunity offered of trying it on a caries, which attacked the right side of the lower end of the bone of the leg, and which had spread to the head of the first bone of the metatarsus, and to the third bone of the tarsus: this caries was accompanied with many sinusses, along the upper part of the foot. I injected the Extract of Saturn without modifying it, and applied it to the bones by means of pledgets.

The

The success was so sudden and astonishing, that I thought myself bound to make the particulars known.

O B S E R V A T I O N X V .

*Communicated by Mr. BRUGUIERE, Surgeon-major of
the Regiment of Tour-du-pin.*

A SOLDIER of the regiment of Mailly had been troubled for four or five years past, with a cancerous ulcer, which occupied all the anterior part of the leg, with a tumefaction of the middle part of the tibia. I gave him a bottle of the Vege-to-mineral Water, and desired him to wet the compresses, when he found them dry; and, as he had the advantage of being near a stove, he warmed the water. My patient followed punctually my orders; in about four or five days, I perceived the edges of the ulcer much cleaner, the bottom red, and the vacancies filled up with good flesh; and that, by perseverance, he was in a fair way of being cured. In fine, after a month's application of this medicine, he was not only freed from this ulcer, but likewise from the tumefaction of the tibia. Of this fact Mr. Laroque, physician to the army and to the hospital at Duisbourg, was an eye-witness. This physician could not help mentioning the cure; and attested it by a memoir, which I sent to Mons. De Paulmy, then Secretary at War, who did me the honour to write me a letter upon the occasion, which I still preserve.

I was not afraid of advancing in the prelude to this Chapter, that my medicine had often proved successful in dispersing abscesses, after they had suppurated. The following Observations will help to prove what I have said upon the occasion.

OBSERVATION I.

Of an Abscess cured by Resolution.

ONE ANTHONY MONTON, soldier of the regiment of Haynault, in Denin's Company, came to the Royal Hospital, with a bubo on the groin as big as one's fist; the fluctuation was very distinct. A cataplasm, made with bread and the Vege-to-mineral Water, was applied to the grievance. Soon after, a very copious discharge of pus was received upon the dressings: the tumour daily diminished, and in a month's time was entirely dispersed.

OBSERVATION II.

On the same subject.

A SOLDIER of the regiment of Vastan came to the Royal Hospital with a venereal bubo, which had been long dressed with every medicine that was thought proper to disperse it. Local frictions had been made use of; but nothing could prevent its suppuration. The fluctuation was very distinct when he came to the hospital. As I had often seen many of these tumours dispersed by my medicines, I applied a cataplasm made with bread and the Vege-to-mineral Water. In four-and-twenty hours time the fluctuation was sensibly diminished, and in a very short time the resolution was beyond all dispute. Some physicians, and many students, were witnesses of this fact. I saw the same thing happen soon after to a soldier of Bearn.

I have advanced nothing here, which cannot be witnessed by others of the Faculty. Mr. Bounhio!, M. D. has just informed me, that he has cured by resolution, with my remedy,

medy, “many buboes in the groin and arm-pits, where the suppuration was established.” These are his own words.

S E C T I O N II.

On the Action of the Extract of Saturn on Fistulas and fistulous Sinusses..

WHATEVER is the nature of the matter of an abscess, and in whatever part of the body it is found, a discharge is always to be encouraged and promoted by incision; for when it has been lodged for any time, it never fails to open a passage to those parts where it meets with least resistance. Now as the opposition from the skin is much greater than that from the parts below it, it is not surprising that matter, which has no external vent, should attack the adipose membrane, and the muscles themselves; thereby occasioning sinusses, hard tumours, callosities, and sometimes a caries of such bones as are found near it.

A judicious practice might prevent these accidents, which too frequently attend the common methods of cure. To this end the usual applications, in inflammations, must be absolutely laid aside, and ours substituted in their stead, either in a cataplasm, lotion, or otherwise. By this means the inflammation may be removed; or, if suppuration cannot be prevented, it may be at least confined to narrow

narrow bounds. When this last is the case, we must lose no time in procuring a discharge, by an opening proportioned to the quantity of the pent-up matter ; that done, our Cerate is to be applied, and the wound washed with the Vegeto-mineral Water, in which the compresses are to be dipped ; by this method it will be soon cicatrized.

O B S E R V A T I O N I.

ONE CHARLES HERBILLON, called the Tulip, a soldier of the regiment of Soissonois, had three fistulous ulcers ; one in the middle of the coronal suture of a considerable extent, the second on the middle part of the right parietal bone, and the third near the coronal suture ; the bones of each were visible. These three ulcers were owing to encysted tumours, which had broke of themselves. The patient was free from any venereal taint. I ordered lotions to be made of the Vegeto-mineral Water, and the Cerate to be poured into the sinusses, with which the pledges were covered ; the patient was dressed twice a-day, and he took care himself to moisten the dressings. He was cured in three-and-twenty days.

O B S E R V A T I O N II.

SOME years ago, a soldier came to consult me for a fistulous ulcer, which he had in the inside of his hand : this ulcer was attended with many sinusses, and proceeded from a suppuration, which had laid bare the flexor tendons of the fingers. The injection of our liquor, and the application of the Cerate, cured him in less than fifteen days.

OBSERVATION III.

A NEPHEW of Mr. Guiscard, Commissary at War at Genoa, had been afflicted for many years with a fistula, which penetrated one of the maxillary sinus's. It was owing to the drawing of a tooth. It was injected for a month with the Vegeto-mineral Water, and cured.

OBSERVATION IV.

Communicated.

MR. REGIS, Surgeon of this town, was sent for to a lady, who had a fistulous ulcer in the inferior and internal part of the leg, which had been occasioned by an erisipelas, which had suppurated. The patient had kept her bed for six weeks, and would never consent to have the ulcer laid open. There were many callosities round its edge, and a considerable tumefaction. Having introduced a probe into the fistula, a finous matter was discharged, and three sinus's were discovered of three fingers breadth each, which ran in different directions. As an incision was not approved of, we were obliged to keep the wound open by tents. Mr. Regis then made use of my Extract, which he injected ; but thinking this method tedious, he had recourse to the green balsam, and Bareges water : but he was soon obliged to lay aside these remedies, and return to mine, on account of an erisipelatous inflammation, which he dispersed very soon with the Vegeto-mineral Water. He had soon after the satisfaction of seeing the bad symptoms disappear, and the ulcer cicatrize.

OBSERVATION V.

ONE TOULOUSE, servant to the Count de Montcan, was troubled with an incompleat fistula, which

which had its opening outwards, about a finger's breadth from the margin of the anus. Having proposed the operation to him, he told me, he could submit to no remedy which would oblige him to keep his bed; but that he was willing to try any one that would not interfere with his business. I judged, from experience, that he might reap some benefit from injections of the Vegeto-mineral Water, the application of the Pomatum, and compresses dipt in the Extract of Saturn. The remedy succeeded to our wishes, as will appear by the account he has sent to Mr. Savage and myself.

" Not having it in my power to observe the proper hours for the dressings, I took care, when I went to-bed, to apply a compress dipped in the liquor. I perceived that it continued daily to be less covered with pus, and that in proportion to my application of this water, the suppuration diminished: it was even stopped in fifteen days' time, and I was just well when I was obliged to ride post; but, by persevering in the use of this medicine, I found myself perfectly cured, notwithstanding I had rode one hundred and fifty miles."

OBSERVATION VI.

Communicated.

I CURED, at Marseilles, a girl of a fistula in the bottom of her foot, which she had had for five years, by repeated injections of the Vegeto-mineral Water, and a compress dipped in the same. The cure was performed in twenty days..

C H A P. IV.

*On Cancers, whether occult or ulcerated; and
of the Action of the Extract of Saturn against
these Complaints.*

IT is a received opinion among Physicians and Surgeons, that external applications are useless, and generally dangerous, in the treatment of cancerous tumours. This opinion is adopted by practitioners of the highest reputation. Mr. Van Swieten, in his Commentaries on the Aphorisms of Boerhaave, declares himself of Hildanus's opinion, whose Observations prove, that plaisters of muci-lage and melilot, mild as they are, augment the redness and pain of a Cancer, as often as applied. This Observation, says the illustrious Commentator, justifies the Aphorism of Hippocrates, who teaches us not to attempt the cure of occult Cancers. We likewise find in Hildanus, and in other Observations, a number of examples which confirm the truth of Hippocrates's opinion.

This opinion, so universally adopted, is the cause of these unhappy sufferers being left a sacrifice to the most horrible pains, which no medicine can calm, and which frequently conduct them to their graves. From hence

one may judge of what importance it would be to discover a medicine, capable not only of relieving, but even of curing this otherwise invincible and cruel disorder. Now I have the comfort to think, that I have discovered such a medicine in the Extract of Saturn, applied in the different forms which are specified in the following Observations. The effects which I have seen, and those which my Brethren have experienced, entitle me to affirm it ; and I beg those of the Profession to examine its effects without prejudice. It is no new system to apply the preparations of Lead in ulcerated Cancers ; every one knows how strongly they have been recommended, and this consideration alone seems to indicate their use in occult ones, especially during their commencement. The reasons which forbid plaisters, and other external applications, are of no force when urged against the use of this Extract, by way of lotion or cataplasm ; because so far from shutting up the pores of the skin, it helps to open them ; very far from heating the diseased part, it cools it ; far from exasperating and irritating, it helps to quiet. Again, by getting to the bottom of the grievance, it gives motion to the inspissated and stagnated fluids, without any inconvenience resulting from it ; and if the application is continued, the cancerous tumour is observed to disperse, or at least it gives ease to the patient, which is no small point gained.

But

But we are not to neglect internal remedies during the external use of the Extract of Saturn. I look upon this remedy, with respect to the greater part of external complaints, and particularly for the treatment of schirrhous tumours, as I do the preparations of steel for the removing of obstructions and complaints of the bowels; or those of mercury for the venereal disease; but with this distinction, that the efficacy of the different preparations of Lead is more to be depended on than those of steel for schirrhous tumours and obstructions, which every one knows often baffle them.

I shall place at the head of my Observations on this subject, a letter written to the wife of the intendant of Languedoc, by a lady of her acquaintance, who had applied my remedy to the cure of a Cancer, with which she was afflicted.

O B S E R V A T I O N I.

“ THE Extract of Saturn, Madam, does wonders: pray send me some more of it. The Potatum has likewise been of great service. I was at first afraid of the pure Extract; but though it has been applied only twice, it has done all that could be reasonably expected, so that now the wound is clean and sensible.”

O B S E R V A T I O N II.

I WAS sent for to Agde, to two religious women, one of whom had an ulcerated, the other an occult cancer. The first of these Cancers indicated the operation, but a considerable tumefaction of the axillary

axillary glands rendered it unsafe. Depending on the efficacy and activity of my remedy in removing obstructions, I applied it in form of a cataplasma, and undertook the operation, which the patient bore with great resolution. When the suppuration was established, and I observed a favourable change in the glands, I returned home. Soon after, Mr. Coste, a physician of this town, who attended them constantly, and was thereby a judge of the effects of my medicine, wrote to me the following letter.

" Our Religious continues well, is grown fat, and does not find any inconvenience in adhering strictly to the rules of the Convent. She constantly takes ass's milk, morning and night. The wound of the breast is closed of itself, without being attended with the least bad consequence; and, thanks to your remedy, the axillary glands are void of swelling; which you know was not the case before the operation.

" As to sister D'Auby, the cataplasms made with the Vegeto-mineral Water, which have been continued for these six months, have entirely dispersed the swelling of the glands; and it is only at certain times that she finds any inconvenience from them; which is so trifling, that I make no doubt but a continuation of the above cataplasms, for some time longer, will soon restore her to her former state of health."

OBSERVATION III.

Communicated by Mr. ALENGRY, Surgeon-major of the Fort du Bréscou.

NOT long ago I cured, by means of the Extract of Saturn, two occult Cancers in two persons of distinction. Some time before I undertook a third, which afflicted a person about four-and-twenty years of age: In fifteen days time the tumour

mour was considerably diminished, and soon after entirely dispersed.

O B S E R V A T I O N I V .

Communicated.

MR. PECHAGUT informs me from St. Nicholas de La Grave, that he works miracles with my medicine; and, among the numberless cures he has performed, that one is very remarkable: It was on a child, who had a cancerous ulcer on its cheek, on which Mr. Pechagut applied our Vegeto-mineral Water; by which means the ulcer was consolidated in twelve days, to the no small astonishment of every one.

O B S E R V A T I O N V .

Communicated by Mr. DIDIER, Surgeon-major of the Royal Corsican Regiment.

DURING my stay at Antibes, I was desired to visit Mr. Merle of this town, who was afflicted with a Cancer, which was partly ulcerated and partly occult. I covered the pledgets with the pure Extract of Saturn; the compresses were dipped in the water, and I took care to wash the ulcer well with it. In a few days there was a change for the better. Being obliged, at that time, to join my regiment, I left the patient in a fair way of doing well.

O B S E R V A T I O N VI .

THE under cook-maid belonging to Mr. Le Prevôt, about fourteen or fifteen years of age, had a considerab'e tumour in one of her breasts, which was very hard, and of an unpromising appearance. She was brought to me. I ordered cataplasms of bread and the Vegeto-mineral Water; by the renewal of which three or four times a-day, she was cured in a fortnight.

OBSERVATION VII.

THE daughter of one Henri, a gardener, about twelve or fifteen years of age, had received a blow on one of her breasts, which had given rise to a considerable tumour. I ordered cataplasms of bread and the Vegeto-mineral Water, and in ten or twelve days she was cured.

OBSERVATION VIII.

ONE JANE DE RIUSSE, wife of Vedel, a baker of this town, in about her forty-sixth year, had been afflicted with a schirrhous, unequal, shining tumour on her left breast for some years past ; but she had paid no attention to it, on account of its indolence. On the stoppage of the menses, it turned to an occult Cancer. In four or five months it made some progress ; and pains, from which she had been hitherto free, now began to torment her, and at last to be very sharp and piercing. She shewed it to me, and seemed the more distressed at her situation, as she had before consulted Messieurs Chaptal, Peliston, and Giraud the elder, my confrere, who all looked upon it a confirmed Cancer.

The effects which I had seen my metallic remedy produce, in many similar cases, induced me to prescribe a cataplasm of bread and the Vegeto-mineral Water, which I ordered her to renew three or four times in four-and-twenty hours, and to observe a proper regimen ; to take herb broths, and thin whey in the morning. The patient, after a short time, found herself better ; she shewed me the tumour, which I found diminished ; and though she neglected both the application of the cataplasm and the regimen I had prescribed, I perceived a gradual diminution of the evil ; the pains left her, and in about two months she was perfectly cured.

R E F L E C T I O N .

From this Observation, joined with many others, consequences may be drawn of the most beneficial kind; for they serve to prove by experiments, how much those are, and have been to blame, who forbid external applications on Cancers, whether in their commencement, or after they are confirmed. But the greatest advantages of all are their methods of cure. We cannot say too much to prove our assertions, seeing our opinion contradicts that of the greatest men; and that it is by Observations and reiterated experiments only, we can bring others to the same way of thinking with ourselves.

O B S E R V A T I O N I X .

*By Mr. BROQUENOD the Younger, A. M. and
Student in Surgery.*

A SOLDIER, of the regiment of Burgundy, came to the Hotel Dieu at Montpellier, afflicted with a hard inflammatory tumour on the posterior and lower part of the right thigh; it extended three or four fingers breadth above the ham, and about an inch below it. The surgeon of the ward examined the tumour, and seeing it did not tend to resolution, he applied a cataplasm of bread and water. This was continued for four days without any visible alteration, as it neither dispersed, nor looked as if it would come to suppuration: on the contrary, it rather seemed to grow harder, which determined him to apply resolvents. He then ordered a plaster of Vigo, mucilage and diabotanum.

This

This was continued for eight days without any diminution of the tumour, which he likewise pumped with bran-water : but all was ineffectual. A cataplasma was then applied of bread and Vegeto-mineral Water, which had so good an effect, that in a week's time the tumour was so far dispersed, that there was not the least mark of it remaining.



C H A P. V.

On Sprains, Stiffness of the Joints, and Relaxation of the Ligaments; and of the Effect of the Extract of Saturn on these Disorders.

1. **A** Stiffness of the joints may be occasioned by a redundancy or thickness of synovia, or that fluid which Nature has provided to keep them supple. This may proceed from various causes, both external and internal. I shall not enter into a detail of them, as the only object I have in view is to mention such facts as may prove of service to the Gentlemen of the Profession and their patients.

It is allowed, on all hands, that a redundancy of this fluid, when once fixed, is not easily removed ; and it is equally certain, that the applications hitherto made use of to disperse it, have often proved useless : and that in course of time, its hardness and consistency render the disease absolutely incurable.

Our

Our application is the true specific for effecting a resolution of this kind of tumours, especially in the beginning. In the course of a long practice, I have always experienced it to be effectual in cases where this fluid was thickened, whether in the joints or involucra of the tendons, even when the sharpness of the humour had occasioned gouty swellings. However, what I have advanced is not grounded on my own Observations only, but on those of many practitioners ; as will afterwards appear. Before I enter upon the facts which I have to mention, I think myself obliged to declare, that we owe to the Mareschal de Richelieu the perfection of the remedy which we employ for the cure of such disorders in the joints as are occasioned by the thickness of the fluid lodged in their cavities. The addition of soap to the other ingredients of the Pomatum, of which we shall give an account in its proper place, was invented at Genoa by that illustrious nobleman. It was with this Pomatum I made a cure, in the year 1748, of which I shall give a detail, and which is one of the most surprising of the kind that was ever performed.

2. Our remedy is also admirable in all cases where the ligaments of the articulations are relaxed, whether the cause which produced that relaxation be external or internal, general or particular, &c.

3. Every body knows what is meant by the word Sprain : it is a violence offered to

the ligaments of an articulation by an external cause ; such as an effort, a fall, a blow, &c. A sudden tumour always ensues, proportioned to the force with which the cause acted, and to the quality as well as number of the ligaments which suffer. I have often had occasion to see in my practice, that the common external applications used in these cases augmented the pain, whilst ours constantly relieved it, and effected a cure in a few days. It is very necessary to observe, that there is nothing more opposite to sprains, than the application of fat, oily substances ; such, however, are always used : hence the swelling remains, and the joint is weakened by a long disease, and excruciating pains are felt on every change of weather.

4. Before we come to the Observations, it may be expected that I should say something of luxations : but as this would be wandering too far from my present subject, I have referred the detail of it to the end of this Chapter ; contenting myself to observe here, that my remedy is superior to all others in diminishing the inflammatory swellings, which is the necessary consequence of luxations from an external cause.

OBSERVATION I.

Communicated by Mr. GAUTIER, Master-Surgeon at Aix in Provence.

NOT long ago, one of my confreres and myself saw a person of seventy years of age, who had a spurious

spurious ankylosis. We made use of Mr. Goulard's Pomatum, and pumped the Vegeto-mineral Water on the part affected; by which means the cure was completed in three weeks.

O B S E R V A T I O N II.

Communicated by Mr. CREMOUX, an old Surgeon of the Dauphin Regiment.

I WAS sent for to a young man, who had a considerable tumour on one of his knees: it spread itself over the whole articulation; where I was obliged to make many incisions. By bathing the part with the Vegeto-mineral Water, and applying the Pomatum, the disorder was perfectly cured, though of a long standing.

O B S E R V A T I O N III.

Communicated by Mr. ROBERT, Master in Surgery.

A YOUNG LADY had been afflicted for six months past with a spurious ankylosis, and cutaneous ulcers. This disease had seized that part of the leg where its articulation is with the foot, and all that of the tarsus. Many remedies had been prescribed without success; and she had no other prospect than that of being bed-ridden for the rest of her life. In these melancholy circumstances, I had recourse to Mr. Goulard's medicines, as to my last resource; which I made use of by pumping, fomentation, and bath. The success far exceeded our expectations, for in a few days my patient was free from all her complaints. The motion of the joint is again restored, and the ulcers have disappeared.

OBSERVATION IV.

*Communicated by Mr. BOURQUENOD, my Confrere,
of Montpellier.*

I ATTENDED a soldier who had an anchylosis, which took its rise from an extravasation of synovia, or mucilaginous juice: he was cured in three weeks by Mr. Goulard's medicine, to which I added some grains of sal ammoniac.

OBSERVATION V.

Communicated by the same.

I WAS sent for to a young lady, who for a long time had been afflicted with a spurious anchylosis, which had hitherto been treated without success: I cured her in three weeks by the application of the Vegeto-mineral Water, and a cataplasma made with the above water, the four resolutive meals, and the powder of camomile, mellilot, and sal ammoniac.

OBSERVATION VI.

I SAW a gentleman at Genoa, who, in consequence of a fit of the gout, had an anchylosis on the knee. I ordered him to pump the part with the Vegeto-mineral Water; he found himself much better in fifteen days, and was forced to make use of a crutch half a foot longer than the one he had used before.

OBSERVATION VII.

Communicated by Mr. BOURQUENOD.

I WAS sent for to a young lady, who had a considerable swelling on the articulation of the knee, accompanied with a painful tumour about the bigness of a hen's egg, and very like a large tumefied

tumefied gland. Many remedies had been unsuccessfully tried for a month past : in seven or eight days time, by the application of the cataplasma described in Observation the fifth, the swelling and hardness were diminished ; and in a very short time this lady, who had before lost the use of her leg, walked as well as she did before her complaint.

O B S E R V A T I O N VIII.

Communicated by Mr. Roux, Surgeon-Major of the Regiment of Vastan.

A YOUNG LADY strained her foot so violently in walking, that she was obliged to be carried home. Her foot was immediately put into some Vegeto-mineral Water, and compresses were applied to the part, dipped in the same : in two days time she was perfectly cured.

Mr. Roux adds, that on many like occasions he had used the Vegeto-mineral Water with the greatest success.

O B S E R V A T I O N IX.

THE CHEVALIER DESQUILLES, son of the Marquis De Mesplex, of Pau in Bearn, page to the Duke of Orleans, being at play with his companions, in one of the rooms of the Palais Royal (this room was parquetté and waxed over) made a considerable effort by an extention of his legs, the one from the other. The ligaments which confine the head of the femur in its socket received so considerable an injury, that the patient, through the excessive pain he felt, was obliged to be carried up to his chamber. Messieurs Faget and Marsolan, two eminent surgeons, were sent for ; nor was any thing spared to give their

patient ease; they attended him for above six months without success; and as his pains continued to increase, it was thought proper to send him to Bareges. At first, these waters seemed to relieve him; he then went to his father's house, when his pains, during the winter, returned upon him with double violence. This determined him to have recourse in the spring to the said waters: but they only served to add to his sufferings; upon which he was carried to Montpellier in the year 1749. A consultation was there held of Messieurs Lazermés and Serane, physicians, and Mr. Lamorier, my confrere, and myself. The following is an account of his situation: When he lay down, the diseased thigh was longer than the other; it was continually bent, and could by no means be moved, without causing great pains in the flexor muscles. The part was cold, and it was with difficulty that any warmth could be communicated to it. The patient could not move it without assistance, and even then felt excruciating pains both in that part and the leg; he was unable to put his foot to the ground, as he was to walk without crutches. Having examined the part, we found the head of the femur had been forced out of its acetabulum or cavity, without being above its level: this was apparent from the inequality of length in the limbs, especially when the patient was put into certain positions. It must likewise be observed, that the part was considerably wasted.

We consulted what was best to be done for him in this situation: all present declared him incurable; notwithstanding, it was vaguely proposed that he might try the baths of Balaruc: he was attended by a surgeon of his own; who despaired, like the rest, of his recovery. Upon this, I proposed a trial of my remedies; and the surgeon consented, having orders from the patient's father not to

to neglect any thing which might contribute to his son's recovery. In consequence of this, I ordered a bathing-tub to be got ready, in which I placed my patient twice a day, that he might more conveniently receive the pumping of the Vegeto-mineral Water; observing at the same time to make very gentle extensions of the limb, backwards and forwards: during the fall of the water, the part was rubbed; then my Saturnine plaster was applied, and a warm cloth upon the whole. By a repetition of this constantly twice a day, the patient soon found himself relieved; he began to move the diseased limb without any assistance, the pains diminished, and the natural warmth of the part was re-established. In fifteen days time he was able to put his foot to the ground, and in three weeks to walk without crutches. The use of the plaster was continued for about six weeks, at the end of which my patient returned home, very happy with his situation. Some years after, I received a letter from this gentleman, which, as it gives a full detail of the cure, I cannot here pass over in silence: it was to the following purport. " You have no doubt forgot an unfortunate young man, whom you attended for some time at Montpellier, and who found himself much relieved by your remedies. You know, on my arrival there, I went upon crutches; and by your assistance was able to put my foot to the ground, which I found before impracticable. Since that time I have continued mending; and the clays of Aix, which you prescribed me in conjunction with others of the Faculty, compleated my cure. It is true, I continued lame, but was able to walk without a stick, and go through a good deal of exercise. This was my situation for near five years, and it is only during these six months past that it is altered. The part is wasted, and the

" limb is become shorter than the other. But still,
 " with all this disproportion of the parts, it is in-
 " credible how little I limp, as it is scarcely per-
 " ceptible when I make use of a high heel. I suf-
 " fer at times, and more so since my arrival at
 " Thoulouse. I do not know whether I am to
 " attribute this change to a violent exercise. I have
 " given myself much to hunting, running, and
 " leaping. This is my present case; I hope you
 " will be so good as to give me your advice.

" I am, &c."

OBSERVATION X.

Communicated.

MADAME DE LA GOMERCINI, a Genoese lady, had been troubled from her childhood with a relaxation of the capsular ligaments of her left thigh. The disorder had been increasing for fifteen years past; and so much so, that the motion of the part was insensibly lessened. The weakness was so great, that she was unable to support herself; as she likewise was either to walk, sit down, or get up without assistance. Though the disorder had originally been of a long standing, it was only for the six or seven last years that it had made any considerable progress. When I had the honour of attending her, in company with two Genoese physicians, I found her pains excessive, and the whole thigh considerably emaciated. For many years past, this lady had consulted the most eminent of the Faculty, in different parts of the world, had made trials of various baths, and of many other remedies, without finding advantage from any. Having carefully examined the part, I found, that the head of the femur was displaced, and lodged upon the muscles of the buttock, which made that limb shorter than the other by about four fingers breadth. I concluded, after having examined the griev-

grievance, that by a relaxation of the ligaments of the part, the muscle of the buttock had contracted and drawn the head of the femur from its cavity upwards; and that this, by pressing on the posterior sciatique nerve, gave rise to the pains my patient felt. My opinion was, that she must inevitably remain a cripple, and that the limb would at last wither away; and, in fine, that the only method remaining to give her ease, would be to replace the head of the femur in its acetabulum: To effect which, I took the following method:

I ordered two jugs to be filled with the Vegeto-mineral Water warm: one assistant held the trunk, another the lower part of the limb, who gently moved it backwards and forwards; in the mean time, a third poured from the jug the Vegeto-mineral Water upon the part, whilst a fourth was employed in rubbing it. It was not long before the lady found the good effects of this operation. The head of the bone was soon brought upon a level with its cavity, and in less than fifteen days re-entered it. My patient was then able to support herself, and walk. I took care to apply one of my Saturnine plaisters to the grievance, and a bandage upon that. This lady persevered in the use of my remedies for above two years, after the bone had been replaced. Though I have not seen her for a considerable time, I am well assured that her cure has been compleat; seldom a year passes, without my hearing of her; and I am informed that she finds not the least bad effects from her old complaint.

O B S E R V A T I O N XI.

A LADY of this town fell in her apartment on the articulation of the femur with the iliac bones: a Priest, who pretended to be a bone-setter, was sent for, and soon after, myself. On my arrival,

I asked him what was the matter ; he told me the femur was a little dislocated. I could not help representing to this knowing gentleman, that an imperfect luxation of that bone was impossible. Upon examining the grievance, I found there was only a simple contusion of the ligaments ; notwithstanding which the lady was very lame after her fall ; but the application of my remedies soon eased her pains, and prevented any farther relaxation of the ligaments.

OBSERVATION XII.

A SAXON nobleman had a fall, which caused a luxation of the radius, attended with a considerable contusion of the adjacent parts. He was attended for some time by many eminent surgeons ; but finding he had lost the use of the arm, he did me the honour to write to me from Bourdeaux for my advice, which I sent him, with my Extract of Saturn, and the receipt for making my Pomatum with soap. Mr. Giraud, an able surgeon of Agen, informed me, that he had seen this gentleman at Bareges ; and had learned from him, that my medicine had done him great service : this account the above gentleman confirmed to me in person, on his road to Montpellier.

OBSERVATION XIII.

DURING my stay at Genoa, I assisted at a consultation with Doctor Balby, and another of the Faculty, at the convent of Portonia, which was held on Madame Morande's account, one of the Religious. This lady had the tendons of her hand so contracted, that it had been closed up and motionless for six years past. She informed us that she had in vain applied various remedies which had been prescribed to her by the most skilful of the Faculty. I enquired of her to what she attributed her

her complaint. She said she could contribute it to nothing but to her employment for many years, of cutting the portions of the Religious with a very large knife. I concluded from thence, that the little synovial glands which are seated in the sheaths of the tendons, had been injured by this work ; and that the synovia being inspissated and dried up, had caused the contraction of the tendons, and consequently the immobility of the fingers. I was determined to make use of my preparations with the Extract of Saturn ; and this the more willingly, as I had learned, by experience, how very proper this metallic remedy was to resolve the inspissated juices, which choak up the vessels, and even the synovia in the articulations ; as likewise to restore weak parts to their proper tone ; especially when lost by an accident.

I began, then, by bathing the whole hand in warm Vegeto-mineral Water ; during this, an assistant rubbed it very gently : care was taken, at the same time, to keep up the warmth of the water with embers. In about half an hour after the bath, I ordered the diseased part to be rubbed for a certain time with the soap-pomatum ; after which, it was entirely covered with one of my Saturnine plaisters. I put a soft cushion in the middle of the hand, and a bandage about the wrist, with fillets to draw back the fingers, and keep them outwards.

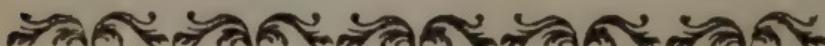
This method was regularly pursued twice a day ; nor was it long before we perceived its good effects, as the diseased part daily mended. After the fifteenth day the patient was able to open the hand at pleasure ; and by its daily gaining strength, our Religious was in a condition, in less than a month, to write, sew, and attend to her usual vocations, except that one of cutting the portions. I own I was astonished myself with this sudden cure, which was remarked by the whole town of Genoa ; and

it did not a little contribute, with some others I performed with the same remedy, to the offer which was made me by the Town, if I would fix there, of settling a much larger pension on me than what was generally granted to French surgeons, who are established in that place, by an old foundation.

OBSERVATION XIV.

On a Retraction and Hardness of the Flexor Muscles of the Thigh, accompanied with a considerable Tension of the Musculus Biceps.

A DAUGHTER of one Ayrel, a shoemaker, of about eleven years of age, had her right thigh so contracted, that if any one offered to move it, however gently, she suffered intolerable pains : in this situation she had remained for three months, and many remedies had been applied without success. She was at last brought to me. I thought that the pumping of the Vegeto-mineral Water upon the part might be of great use to her : nor was I deceived in my conjectures ; for by following my advice she found ease in less than two days ; and on the tenth she was able to walk about as usual.



Particular REMARKS upon INCOMPLETE LUXATIONS of the KNEE by external Causes.

WHEN the bone is luxated or displaced by a relaxation of the ligaments from the internal cause, the cure is very difficult. When the ligaments have once lost their tone, they become more and more relaxed, partly from

from their own disposition, and partly from the weight of the limb, and contraction of the muscles of the part affected; and if the bone is not confined in its place by a bandage, the cavities of the joints are filled with synovia, which is accumulated and thickened to such a degree, that it will be a difficult matter to replace the said bone.

Mr. Petit, in his excellent Treatise on the Diseases of the bones, takes notice, that an incomplete luxation seldom happens to the articulation of the knee; and this is true, because a round extremity, covered with a polished and smooth cartilage, and oiled with its proper fluid, cannot remain long upon the edge of its socket. The head of a bone thus circumstanced, when driven to the edge by any external violence, must either fall out or return into its socket. Thus, either there will be no luxations, or it will be compleat; which is far from being the case of such joints of the human body as are formed like a hinge.

It is nevertheless true, that the bones of the joint of the knee are sometimes dislocated by external causes in an incomplete manner; but this never happens immediately, or at the moment in which we fall, or receive a blow: it can only happen in cases of falls, or uncommon exertions, which particularly affect the ligaments that are strained and bruised; and disposed to relaxation. The bone not being fixed exactly in its socket,

the

the fluid gathers, and thickens by degrees ; the relaxation increases, the extremity of the bone first loses ground, and then is forced quite out of its socket.

These kinds of luxations are generally neglected, and looked upon incurable ; they are so in effect, from a want of proper applications. Now this would not be the case, were they considered in the light of real ruptures ; that is to say, they require the same attention, and the relaxation of the ligaments is to be prevented by a bandage, proper applications, and perfect rest, to give these ligaments time to recover their tone ; the part affected will otherwise waste, it will be stretched or lengthened by its own weight, and at last the cavity of the joint will be filled with synovia, which must necessarily force the head of the bone quite out of its socket, and give rise to a compleat luxation.

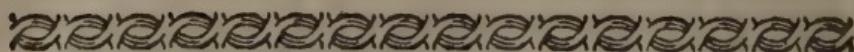
When we would remedy luxations of this kind, two things deserve our particular attention : first, by extention and counter-extention, we must gently restore the bone to its place ; secondly, we must fix it there by a proper bandage. With regard to external applications, I am not afraid to assert, that no baths, no pumpings are equal in their salutary effects to such as are produced by our metallic fluid, mixed with common water, to which is added a little brandy : the efficacy of this fluid is seconded by the

application of the Saturnine plaster, made as directed in the formulæ.

When the head of the bone has been conducted into its cavity, we should be careful to give frequent but gentle motion to the joint: this motion, often repeated during the pumping, and assisted by the action of our remedy, produces surprising effects; and I can venture to say, that it is particularly efficacious in acting upon the redundant fluid, when thickened in any cavity, or the sheaths of the tendons, which is the case in anchyloses.

In luxations where the ligaments are much injured, great care must be taken not to harass the part too much after the bone is replaced. The gentleman who makes the subject of the Ninth Observation, would have had nothing to fear from a relapse, if he had not indulged himself in violent exercises, such as hunting, dancing, and other movements unfavourable to the recovery of the tone of the articular ligaments: he should have allowed more time to the bathing with the Vegeto-mineral Water, and to the use of the Saturnine plaster.

When people advanced in years have the misfortune to fall, the consequences are dreadful. As often as the ligaments of the joints are affected, the disease is generally too violent to be compleatly cured. But even these patients may be eased by our remedies, and by a well-made bandage, which they must wear for a long time.



C H A P. VI.

Of Gouty and Rheumatic Pains, and the salutary Effects of the Extract of Saturn in these Disorders.

WE mean by Rheumatic Pains, those pains which are seated in the fleshy parts of the muscles, and membranes which surround them. They are generally periodical, and are divided into universal and particular, according to the parts they attack, whether all those of the body in general, or one or two in particular.

Pathologists are very careful not to confound simple with complicated Rheumatisms, which are either gouty, venereal, or scorbutic; for although it be true, that many other disorders may occasion a complication of rheumatic pains, nevertheless experience teaches us, that they commonly attend the gout, venereal disease, or scurvy.

The degrees of these pains we are speaking of vary almost *ad infinitum*. They are sometimes so inconsiderable as to permit the patients to attend their occupations; but they are in general so acute, as to deprive them of motion. The violence of the pain is sometimes so excessive, that the whole body is rendered motionless, nor can be stirred without

without putting them to insupportable torture.

We shall not enter into a detail of the distant causes that produce Rheumatic Pains ; their causes are innumerable : we will only observe, that in the Army, whose interest and advantage we always have in view, these diseases are often occasioned by a bad regimen ; by cold and damps, to which the soldiers are often exposed ; by too free an indulgence in the use of brandy and other spirituous liquors, &c. But let the cause of Rheumatic Pains be what it will, they are never produced but when the serum has contracted a certain thickness or sharpness, or both the one and the other of these causes ; which, when considered separately, or in a state of combination, occasion, 1. A flowness in the circulation of the lymph, which moistens the texture of the muscles, and their external teguments. 2. More or less considerable obstructions in the lymphatic vessels of these parts. 3. Irritations and vellications of the nervous fibres which enter their compositions. 4. Lastly, the other effects which accompany or follow the above morbid changes.

Practice informs us, that there are Rheumatic pains exceedingly obstinate ; amongst which, those rheumatisms that are gouty or venereal are sometimes ranked. Sometimes we also meet with infinite difficulties in the cure of simple rheumatisms ; but

this is seldom the case, except they attack bodies where the mass of humours, and especially the lymphatic parts, are vitiated with a remarkable acrimony, joined to an insurmountable viscofity.

It is pretended that the periosteum is sometimes the seat of this disease; nor is this improbable, seeing it is charged with such a number of lymphatic vessels: but we must take care not to confound the Rheumatic Pains which are attributed to an injury of the periosteum, with those pains that attack the interior texture of the muscles, and are felt very deep.

In physic and surgery, diseases to which the least attention is paid, and where the treatment appears the least interesting, become often in the end the most incurable evils, and baffle all the knowledge of the greatest practitioners. This is often the case in Rheumatisms neglected at first, or ill treated; they often become inveterate, and last not for years only, but for life; allowing the patient some intervals of ease, but returning periodically with more or less violence.

The conduct of wise and prudent practitioners does not expose their patients to the like inconveniences; for after having employed proper remedies, such as bleeding, purging, and cooling draughts, &c. they prescribe a long course of sweeteners, and above all the use of a milk diet, which gives

great

great ease in these pains, especially if the patients constantly lead a regular life. Bathing and pumping with certain mineral waters often effect cures of rheumatic complaints, which had been proof many years against all kinds of internal medicines. The medicinal particles of these waters are introduced into the pores of the skin, especially if their passage is facilitated by frictions or pumpings; they penetrate even to the obstructed lymphatic vessels, where they attenuate and divide the viscous fluid that excites the Rheumatic Pains; this lymph having thus recovered its natural fluidity, takes the ordinary course of circulation. And as the acrimony of this humour had been entirely destroyed, or very much diminished by the antecedent use of sweeteners, the two vices which constitute rheumatic complaints are destroyed; and from hence may be dated a radical cure; which indeed may be effected by any other medicine, either internal or external, which by its penetrating quality will destroy viscosity, and by its sweetening quality blunt the acrimony and sharpness of the lymph.

It would be wandering from our subject to enlarge upon the manner in which mineral waters act in the cure of Rheumatism; let us fix our attention only upon the artificial mineral water, which is employed with so much success in the treatment of these disorders; I mean the Vegeto-mineral Water that

that contains particles of lead, which by their fineness, pliability, and volume, operate with such success in the resolution of tumefaction in the lymphatic vessels, of which we are now speaking. What I here mention is not an idle theory, but a rule of practice, of which I have frequently experienced the advantages. I can then confidently affirm, that I have often employed the Vegeto-mineral Water against Rheumatic Pains, in lotions, pumpings and baths ; and so far from having seen any bad effects from it, I have constantly met with the greatest success, conjointly with other practitioners, who have made the like trials.

The argument formed against our remedy, and founded on the accidents that happen to persons employed in lead mines, may therefore be dropped. The analogy cannot be admitted, seeing in the use of our different applications of the Extract of Saturn, we have nothing to apprehend from the metallic, arsenical, or other exhalations, which alone occasion the symptoms that are too frequent among miners.

A little attention to the manner in which the Extract of Saturn operates in rheumatic cases, is sufficient to convince us, that it possesses an attenuating, relaxing, and anodine quality ; so that the solution of the viscous, tough fluid, which occasioned the disease, far from producing the fatal accidents that so frequently attend the use of dispersers, and

and still more of repellers, operates by degrees, and without danger; first, a diminution, and then a total cessation of the Rheumatic Pains, and of the other symptoms that accompanied them. When these pains are extremely obstinate, I apply the Saturnine plaster upon the part affected.

Let me be allowed to remark here, that in the royal hospitals, a better remedy cannot be employed in Rheumatic Pains than that, which not only myself, but many others of the Faculty have found to be so efficacious on these occasions. The soldiers afflicted with these complaints, when brought to the hospital, find no specific remedy, and are obliged to wait the seasons for bathing in mineral waters, which often prove less effectual than the remedy I propose. It may be objected, that the hospital must be at a great expence in procuring the apparatus for bathing: but to this I answer, that the apparatus is unnecessary, seeing it is sufficient to rub the parts affected with warm Vegeto-mineral water, and afterwards to cover them with warm linen to effect a cure, at least very often, of the most acute Rheumatisms, especially when they proceed from an external cause, as from cold, rain, moisture, &c.

The title of this Chapter has already intimated, that the Extract of Saturn is also efficacious in periodical pains that attack the joints, and are termed gouty. The

synovia

synovia being too thick and sharp, when accumulated either in the cavity of the joints, or in the glands that are dispersed in the capsular and articular ligaments, excites cruel pains of the gout, which laudanum itself cannot relieve. The Extract of Saturn, by its searching, dispersing, and anodine quality, answers the different indications which the treatment of these pains requires; that is to say, by relaxing the fibres, which are over-stretched, it calms the pains; and by dispersing the synovia, it extirpates the very root of the evil. Nevertheless, let it not be imagined from what I have said upon the subject, that I mean to recommend the Extract of Saturn as a specific in the gout; but it is very certain, that gouty people may find in this remedy an alleviation of pain, and a relief which they cannot hope to receive from any others.

OBSERVATION I.

A POOR LAD, after a long imprisonment, was seized with so violent a Rheumatic Pain in his left arm, that it appeared paralytic: every remedy that could be thought of was used for three months successively. The intendant's lady sent for me, and desired I would attend him. I ordered his arm to be rubbed with the Vegeto-mineral Water warm; I then applied one of my Saturnine plasters, and a warm cloth over that. This was continued twice a day; in about eight days he was much relieved, and in ten or twelve was perfectly cured. The success of this medicine was the more extraordinary, as the arm appeared paralytic and motionless,

tionless, and so full of pain, as to give reason to think it incurable.

OBSERVATION II.

A SOLDIER, belonging to the Orleans regiment of dragoons, was troubled with pains in his knee, which mercury was not able to remove. I applied the Vegeto-mineral Water and the Satur-nine plaister, by which means he was soon cured.

OBSERVATION III.

A SOLDIER of the regiment of Brissac came to our Hospital, afflicted with so violent a pain in his right-arm, that neither bleeding nor narcotic medicines could remove it. He was treated as above, and was very soon cured.

OBSERVATION IV.

A SOLDIER of the Lyonese regiment had such violent pains in the articulations of the lower extremities of the right-side, that he was unable to walk without crutches. Every remedy that could be thought of had been tried before in St. Elias's Hospital; upon which he was sent to ours, as it was conjectured they might proceed from a venereal cause. But mercury was administered without effect : his situation continued the same, and he was unable to move. We applied our medicine, as we had done to the former, which gave him almost immediate relief; and, in fine, radically cured him in a few days.

OBSERVATION V.

A SOLDIER of the regiment of Orleans dragoons came to the hospital with violent pains in the articulations. As he had the venereal complaint, he was salivated. Besides the usual frictions, he had many extraordinary ones; but with-

out any relief from his pains, which tortured him day and night. I ordered the diseased parts to be washed with the Vegeto-mineral Water, and to be then covered with my Saturnine Plaister. In two or three days time the patient found benefit, and in seven or eight was cured.

OBSERVATION VI.

In form of Certificate.

WE whose names are underwritten certify, that we have been witnesses to the good effects of the Vegeto-mineral Water, furnished by the charity of Mr. Goulard. It was used by way of lotion on a person attacked with an universal Rheumatism, which it very much relieved on its first application; it was continued for four days successively, without the addition of any other remedy. The patient was one Rose, a menial servant to Mademoiselle La Garde. At Montpellier, the 2d of May, 1757.

OBSERVATION VII.

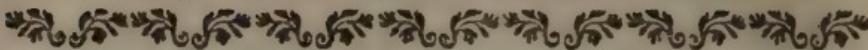
In form of Certificate.

WE certify to have seen one Bessone afflicted with an universal Rheumatism, accompanied with an inflammatory fever, which was very much heightened by a very bad habit. We treated this patient in the usual manner, by prescribing frequent bleedings, purgatives every other day, calming, sudorific, and anodine medicines; from all which she found no relief. On the eighth day, the application of the Vegeto-mineral Water, charitably furnished by Mr. Goulard, was made, in which her whole body was bathed, and the effect was very visible the next morning, when she began to move her fingers. By the continuation of the above remedies and lotions, the patient was able to move her limbs, and even the whole body, though she still remains in a languid state. O B.

O B S E R V A T I O N VIII.

THE DAUGHTER of a shoemaker, who lives in the suburbs of this town, of about ten or eleven years of age, was afflicted last summer with a contraction of the muscles of the thigh, and of those of the leg of the same side. Her parents had consulted many of the Faculty, and particularly Mr. Leroi, professor of physic. Different remedies were prescribed without success, which made them fear she would become a cripple. In fine, she was brought to me; and upon examination I was of opinion, that the part affected should be bathed with the Vegeto-mineral Water warm, and then covered up with warm cloths. This was accordingly done twice a-day: and in about ten or twelve days she was so well recovered, as to be in the streets with her mother; where I met her, not without some degree of surprise.

I shall finish this Chapter with the above Observation, because I think it useless to add any others, which would indeed be too numerous, considering the great use which is made of this remedy, both in this town and the Royal Hospital, for these kinds of complaints.



C H A P. VII.

On Tetters.

TE T T E R S may, in general, be looked upon either as affections purely local, or as diseases that are occasioned by a vicious quality of the general mass of the blood and lymph. The first species presupposes a morbid change in some part of the texture of the skin, in consequence of which the humours stop, and afterwards acquire more or less acrimony and viscosity; the others essentially depend upon a particular depravation of the humours, and principally of those that are lymphatic. This second species of Tetters is often hereditary, and more difficult to cure than the first; the morbid cause being not less general than it is in the venereal disease, scurvy, king's-evil, &c,

This cause once supposed, it will be very easy to explain, why Tetters indistinctly appear in every part of the body; why they are fixed sometimes to one part, and sometimes pass from one place to another; why, having once disappeared, either by the effect of medicine or simple efforts of nature, they return again when they are least expected,

pected, especially when a bad use has been made of the nonnaturals ; as when the exercise has been too violent, when spirituous liquors have been taken too freely, &c.

My design is not to enter here into a theoretic detail of the different kinds of Tetter, or of all the causes which produce them, and the marks by which they are distinguished ; I only mean to insinuate that these cutaneous eruptions, whether simple or complicated, or even hereditary, may not only be undertaken, but radically cured, without the danger of those accidents which are magnified by a set of practitioners, who are pleased to stile this disease Incurable. My remedy prevents every mischievous accident in the cure of Tetter, let them be dry, moist, pimpled, scabby, crusty, &c. It is a fact, of which I am convinced by a practice of between fifteen and eighteen years, particularly in the Royal Hospital, where, during the space of more than ten years, I have met with the greatest success, in the treatment of all Tetter that I met with, in my practice there ; though, amongst the numbers of those that I saw afflicted with them, there were many that resembled real lepers.

I once thought, with the rest of practitioners, that the cutaneous diseases which are produced by a general vice of the mass of the blood, ought never to be treated by external applications ; seeing these diseases are

generally salutary drains for purifying the blood, and that most part of the external applications have a repelling quality, which drives the matter back into the mass of humours, where it produces more dangerous accidents than those which are caused by the matter itself, when permitted to discharge itself through those parts of the skin where nature has left a passage. I should not have changed my opinion concerning the treatment of Tetters, if I had not been perfectly convinced, that my metallic remedy has no repelling quality; and if I had not seen in my practice a number of patients, attacked with other cutaneous diseases of long standing, radically cured without any inconvenience; though the Gentlemen of the Profession, who had visited the patients before I was called in, had declared the disorder to be a critical discharge from the mass of blood. In a word, I am assured by a very long experience, that the repelling quality attributed to lead is a chimæra; and my opinion will be readily embraced by all who will take the trouble to reflect, not only on the efficacy of this remedy in cases where stagnated humours are to be dispersed, but likewise on its analogy with crude mercury, which acts by its weight, and the divisibility of its parts. Now Lead having parts still more fine, mild, ponderous, and not less divisible. is, of consequence, as proper to divide and disperse the morbid concretions

produce by certain ferments that infect the mass of blood, and destroy them as efficaciously, as mercury destroys venereal concretions. This is demonstrated by its action upon obstructions of inflamed vessels, upon tumours almost arrived at a state of suppuration, upon schirrhous ones, excrescences, and horney concretions. A more conclusive fact may still be urged against such as insinuate a repelling quality to the preparations of Lead, from the experience of those who have the itch, and make use of our remedy for it ; for it has always been found, that instead of repelling the morbific matter, this promoted the eruption, by the early appearance of a number of pimples, which dried and fell off in the course of the treatment. This Observation has been justified in the cure of the itch in two thousand five hundred patients (see the Chapter on the Itch) effected by my remedy, without any bad consequences ever happening.

The metallic particles of our application insinuate themselves into the most minute pores of the skin, and penetrate to the only source which produced the tetterous complaint : when arrived there, they thin and divide the humour, blunt its acrimony, favour its egress through the pores of the skin, and at last radically cure the disease, sooner or later, according as the morbific matter opposes more or less resistance to the effect of our remedy.

We think it necessary to observe, that as venereal diseases require certain preliminary preparations to render the action of the mercury more efficacious upon venereal concretions, so patients afflicted with Tetter should be duly prepared for the application of the metallic remedy which we use : these preparations consist in bleedings, purgings, domestic baths, herb-broths, mineral waters, &c. and these may be left off sooner or later, according to the nature, date of the disease, and constitution of the patient. If these precautions are taken, we need be under no apprehension for the events, but may rest in the greatest security : for I dare advance, upon the foundation of a long experience, that the same success follows this treatment of the most inveterate and envenomed Tetter, as does that of the most confirmed pox when it has been methodically treated : that is to say, when frictions have been preceded by proper preparations.

As often as we dress the patients with our metallic remedy, the eruption becomes more visible. We conclude that this matter is dried up in certain places of the part affected, especially when the Tetter is crusted or ulcerated, if a fine red skin is drawn over the healed part, while the neighbouring places continue to yield a thin yellow humour, which never ceases to run till it is entirely exhausted : this humour is less sensible, when the Tetter have a white head.

Tetter

Tetters are in general very troublesome, either from the insupportable itchings that they occasion, or from an acrimonious suppuration. Those who are afflicted with this disease, are much inclined to scratch, which so irritates and inflames the skin as to produce restless nights: sometimes, again, the parts inflame, suppurate, and ulcerate; and it is not at all uncommon to see these ulcers become habitual, for the want of proper remedies to calm the irritations, and blunt the acrimony of the purulent matter that runs from them.

The variety of external applications in the treatment of Tetters is almost infinite: but I am not afraid to assert, that many are useless, and others dangerous. To be convinced of this, it is sufficient to peruse the works of practitioners who have treated of surgery, and particularly the Treatise of Turner, who is the best writer upon the diseases of the skin. This author prescribes a number of remedies; but there is not one upon which we can depend for a radical cure of Tetters; while it would be extremely dangerous to make use of many which he has recommended: such are those which are compounded of vitriol, alum, lime, the sublimate in powder, mercury, verdigrise, white precipitate, red precipitate, and a number of other ingredients, of which the action was never well ascertained, and always to be suspected. The conclusion to be drawn from the above

detail is this: That it is a matter of great importance to have discovered a specific remedy for the cure of Tetters, which are often attended with the most fatal consequences, from the application of the common prescriptions.

But to conform to the order which I have hitherto followed, I shall finish this Chapter with some Observations.

OBSERVATION I.

ONE VICTOIRE, of the battalion of Mayenne, had for twenty years past his leg covered from the knee to the instep with Tetters. He had been in different hospitals, in search of a cure. By the use of domestic baths, herb-broths, and the application of the Vegeto-mineral Water, and the Pomatum made with the Extract of Saturn, (see the Formulae) he was radically cured in seven-and-thirty days.

OBSERVATION II.

A SOLDIER, of the regiment de la Rochaimon, had been afflicted for three years past with a pustulous Tetter on the right leg, attended with insupportable itchings. After having tried without success many remedies, he was cured in the Royal-Hospital in six weeks, by the remedies above-mentioned.

OBSERVATION III.

ONE LA VIOLETTE, corporal in the regiment of Eu, had been afflicted with Tetters in different parts of his body for five years past: he was treated in the manner above-mentioned, and cured in forty days.

O B S E R V A T I O N IV.

FRANCIS GUENIN, soldier in the regiment of Salins, had been afflicted for four months with a white Tetter on the thigh, as big as twice the palm of the hand : he was cured in a month.

O B S E R V A T I O N V.

PAUL GRESSE, a soldier, had been afflicted for five months with pustulous and ulcerated Tetters on his legs and thighs : he was cured in five-and-twenty days.

O B S E R V A T I O N VI.

JOHN REBOUT, soldier, afflicted with a Tetter for six weeks, was cured in seventeen days.

O B S E R V A T I O N VII.

ANTHONY PAGES, of the regiment of Eu, had Tetters on his thigh during five weeks : cured in one-and-twenty days.

O B S E R V A T I O N VIII.

PETER NOVIO, a soldier in the battalion of Dole, had been afflicted with Tetters on the upper part of his thigh for above three months : he was cured in seven-and-twenty days.

O B S E R V A T I O N IX.

JOHN FORET, soldier in the regiment of Burgundy, had Tetters on his fore-arm and thigh : cured in five-and-twenty days.

O B S E R V A T I O N X.

PETER GUENON, soldier, had Tetters on the superior part of his arm for five months : cured in one-and-twenty days.

OBSERVATION XI.

ONE SAINT JACQUES, soldier, had been afflicted with Tetters on his arm and fore-arm: cured in seventeen days.

OBSERVATION XII.

JOHN POLE, soldier in the regiment of Burgundy, had Tetters on the fore-arm: was cured in one-and-twenty days.

OBSERVATION XIII.

IN the year 1746, Mr. de Montbas, captain, had so violent a humour in his legs, that the Marechal De Belleisle ordered him to quit the army to get cured; they were covered with Tetters, that were both inflamed and ulcerated. Many remedies had been made use of without success. On his arrival at Montpellier, he called a consultation of Messieurs Lazermes, Serrane, senior, and myself. The physicians were of opinion, that he should make use of various internal remedies, and go to Bareges. But upon their leaving the room, I assured the patient, that if he would stay at Montpellier, I could be of no small assistance to him. Upon hearing this, he resolved to come to my house, where I gave him the internal remedies that he had been advised to take. I then applied my Pomatum, and the Vegeto-mineral Water. In three days there was so great a change for the better, that I desired Mr. Serrane senior to come to my house, to be witness of it. This gentleman expressed his surprise to me in very flattering terms. The patient, by persevering in the use of the above remedies, was soon in a situation to return home, there to continue the internal ones. The complaint in his legs was removed; and the year after I had the honour of seeing him at Genoa in perfect health.

O B S E R V A T I O N X I V.

ABOUT two years ago, Mr. Lagarde, valet-de-chambre to the Chevalier De Saint-Priest, had a fall from his horse, by which accident the fore-part of his shoulder and breast were bruised. Lavender-water, brandy, and at last a plaster was applied, which he wore for six weeks. On taking it off, the skin was found of a reddish colour : this redness continued to spread over the neighbouring parts, and at last became of the Tetter-kind, and was attended with disagreeable itchings. On the patient coming to me, I gave him some Vegeto-mineral Water, with which he washed the parts affected twice a-day. On the fifteenth he was perfectly cure.

O B S E R V A T I O N X V.

ONE Richardot, a soldier in the Royal Regiment of Infantry, had been afflicted for some time with a Tetter on each leg, which entirely covered all the fore part of it ; it was so inconvenient to him, that he could scarcely walk. He had been for some time in the Royal Hospital at Basancon, where he said they had applied oils, which had helped to increase his disorder. In this situation he was obliged to march with his regiment to Valence : on his arrival there he went to the Military Hospital. A decoction of elder-flowers in wine at first gave him some relief ; but his complaint afterwards being encreased, he was obliged to be conveyed to our Royal Hospital at Montpellier. He was blooded and purged, and ordered to bathe, and take decoctions of herbs. These remedies were assisted by the application of compresses dipped in the Vegeto-mineral Water, and wetted from time to time. In less than fifteen days the patient was cured.

OBSERVATION XVI.

THE 18th of July, 1750, Joseph Benac, a soldier in the regiment of Bresse, came to the Venereal Hospital to be cured of a scurfy Tetter, which infested his whole body : the patient looked like a leper. He made use of the Cerate of Saturn, whose basis is the Vegeto-mineral Water, as may be seen in the Formulae. On the sixth day all the scurf came off ; and by continuing the use of the above Cerate and Water, he was perfectly cured the ninth day of August following, on which day he left the hospital.

OBSERVATION XVII.

Communicated by Mr. BRUGUIERE, Surgeon at Saumieres.

THIS Surgeon informed me, that he had cured a Tetter of a long standing, by the application of the pure Extract.



C H A P. VIII.

On the Itch.

THE Itch is an eruption of little cutaneous pustules, which may be indiscriminately spread over the whole body, except the face ; but is more particularly remarkable on the wrists, between the fingers, on the arms, hams, and thighs.

The Itch is generally divided into two kinds ; one is called the dry or canine, the other the moist Itch ; but these two may be subdivided into four other kinds, which deserve the particular attention of a judicious practitioner. To follow this subdivision, indicated by Mr. Raimond, in his Treatise upon *Diseases that are dangerous to cure*, we will consider the Itch under four different points of view : as, *critical*, *spontaneous*, *symptomatic*, and *communicated*. The first is the termination of an acute or chronical disease, when the matter is deposited on the surface of the body. The second appears of itself, and is not preceded by any illness, but is produced by a thickness and acrimony of humours contracted by a gross unhealthy diet, and a respiration of a moist and foul air ; it principally attacks sea-faring people. The third is an effect or symptom of another disease, as venereal complaints, jaundice, scurvy, &c. The fourth is acquired by touching and dwelling with those who have the Itch.

I said above, that the different kinds of Itch, of which I have given a short account, may be moist or dry. The dry Itch is distinguished by small and almost imperceptible pimples, and a very troublesome itching, that obliges the patients to scratch, whether they will or not. The moist, or the great Itch, is generally marked by more considerable pustules, even often greater than are those of the small-pox : these pustules are com-

commonly filled with matter, and cause less itching than is felt in the dry or canine Itch.

There is yet another species of the Itch, which I have often observed: this is a combination of the moist Itch and ulcerated and crusted Tetters. It shews itself in blotches, as large as the palm of the hand, on the arms, legs, and sometimes also on other parts of the body.

The seat of the Itch is commonly said to be in the glands of the texture of the skin. Mr. Raimond is not at all of that opinion; he thinks that the seat of this disorder is in the nipples, or nervous pyramides, that form the organ of touch. But neither does his system appear sufficiently clear, nor his opinion probable.

It will easily be perceived, that the prognostic of this disease must vary according to the different kinds we have just enumerated. The critical terminates a disease, when the morbid matter is entirely deposited upon the skin, and then does not require any particular treatment. The third kind must be ranked among the diseases of which it is a complication; and with regard to the two others, that is to say, the spontaneous Itch, and that contracted by contagion, we can assert, that they are not all dangerous of themselves, but that this may become very much so, if the matter is imprudently repelled: and this is confirmed by many observations collected by authors, and particularly

larly by Mr. Raimond. It is pretended that in some countries, as in Brittany, the Itch is endemical ; and there we are assured, that a number of people retain, during their whole lives, the leaven of this disorder, which shews itself in pustules, that return and disappear at different seasons of the year.

We come now to the cure, which varies equally with the prognostic, according to the particular nature of the Itch. Of the four kinds taken notice of by Mr. Raimond, there is not one with which our remedy does not very well agree ; seeing it invariably produces the same effect, in multiplying the itchy eruptions, and consequently cleansing the mass of blood. However, we shall speak more particularly of that Itch which is formed by the habit, and of that which is contracted by contact with those infected with it, as these more frequently occur in practice.

Few diseases have had more remedies prescribed for them ; but Turner's Treatise on Cutaneous Disorders presents us with a multiplicity of applications, which are not easily enumerated, and from which the most sanguine practitioners promise a dubious success. Authors of this class must have hoped to promote the interests of mankind. However, I shall make no apology for affirming, that the stile and method of these writers may possibly be as prejudicial to young practitioners, as they are disagreeable and irksome to their readers. The only two specifics for the

the Itch hitherto recommended, are sulphur and mercury. But I think I may, without offending any one, with great truth declare, that I have often seen these medicines not only fail of success, but produce the very worst effects in patients attacked with the Itch. Mercury is known to be a heating and searching remedy, which should never be applied but with the greatest precaution, and therefore should give place to a cooler and safer treatment. With regard to sulphur, my own Observations have convinced me, that it is not liable to all the exceptions which lie against mercury. But not to insist on the danger attending it, when not preceded by proper preparations, it must be allowed, that it is neither so agreeable nor convenient a medicine as one could wish. On the other hand, what we here recommend has every advantage that can entitle it to a preference to the other two: not only its effects are certain, but it is so inoffensive, that no exception can possibly be taken to the use of it. To these considerations I must beg leave to add another, which is suggested by the nature of his Majesty's service. It is certain that the military hospitals will be maintained at a less expence, if my remedy be substituted in lieu of those which have hitherto been mentioned for the cure of the Itch. For though sulphur and lard, of which the ointment for the Itch is made, are not very expensive ingredients to private families, yet the

the great consumption of them in the army is an object which merits the attention of the Ministry; especially if it is considered, that the linen of the soldiers does not suffer so much by the use of our medicine, which will be no inconsiderable saving.

Another advantage that would result from the medicine which we propose, is, that the eyes would not suffer, as they frequently do, from the forgetfulness of the patients, who are too apt to rub them with hands that have been besmeared with sulphur. What I have here said of the effects of my remedy is not exaggerated, seeing I can alledge in its favour more than 2500 Cases, besides the advantageous attestation that has been given me by Messieurs Imbert and Fournier. This alone would be a sufficient recommendation of it, if ignorance, Fordid envy, vile interest, and a thousand other contemptible motives, did not almost always raise a clamour against the man, who presumes to render himself usefull to his fellow-creatures by a new discovery, from a set of people, who never having done any thing to deserve the attention of the Public, seek to emerge from their obscurity by railing at the talents of others. To prevent the malicious imputations of these people, the number of whom is unfortunately too great, I shall lay before the reader such peices, as, in the eyes of every man of sense, must fully justify the praises I have bestowed upon my remedy, less from

a motive of vanity, of which I am not at all susceptible, than from a view of the public utility, and his Majesty's service, which are the objects that have always taken up my attention.

The Royal Marine regiment has furnished us with a great number of people in the Itch, in the Royal Hospital. Mr. Guillerme, surgeon-major of that regiment, who prescribed my remedy, was extremely surprised at the effects he saw produced, and in consequence of them gave us the following certificate.

I, THE underwritten Surgeon-major of the Royal Regiment of Marines, certify. That since Mr. Goulard has made the useful discovery of the virtue of the Extract of Saturn for the Itch, I have examined and exactly followed in his hospital the method he used in the treatment of near two hundred soldiers, who had the itch, belonging to the said regiment. By this excellent remedy all were radically cured, with much greater facility, and in a shorter time, than such as followed other methods, especially since alum and salt have been admitted into the composition. Although the patients have been dismissed from the hospital for above these six months, the Itch has not appeared again on any of them; and all without exception have been free from those accidents, which but too frequently follow the common method of cure, such as imposthumes, and the most alarming internal complaints, &c. Many able physicians of the royal hospitals have made the same observation. Now this proof, joined to the singular effect of this

this remedy, in promoting at first the itchy eruptions, demonstrates that it cannot, with any colour of reason, be ranked among the repellers.

Signed, GUILLERME.

The different regiments of militia scattered over this province have furnished us with a number of patients troubled with the Itch, for these two or three years past ; they have all been cured with equal speed and safety.

Many surgeons in different countries, have made use of the same remedy, with the like success ; nor can we entertain the least doubt of their care and abilities in the preparation or the application of it.

Mr. Soulier, surgeon-major of the regiment of Bigorre, wrote to me from Rochelle, on the 26th of June, that he made great use of my Vegeto-mineral Water in the treatment of various external disorders, and particularly for the soldiers of his regiment troubled with the Itch, who are all cured without any bad consequences attending the application.

Mr. Taignon, surgeon-major of the regiment of Soissonis, wrote to me from Aigues-Mortes, the 6th of August last, to the following purport :

“ ACCORDING to the receipt which you
“ gave me for the Itch, I have made use of the
“ Vegeto-mineral Water upon fifty patients,
“ troubled with that disorder, of the battalion of
“ Limoges,

“ Limoges, among whom there was every species
 “ of the above complaint. I can assure you that
 “ including the time they were under preparation,
 “ such as were the longest in the course of the me-
 “ dicine did not exceed sixteen days, without the
 “ least accident happening to any one of them.
 “ But what appeared to be remarkable, is, that
 “ the eruptions were increased during the first days,
 “ which ought to give your remedy the prefe-
 “ rence to all others. I have also made use of the
 “ same medicine with great success in the treat-
 “ ment of the phymosis and paraphymosis, for the
 “ cleansing of ulcers, and in every species of in-
 “ flammation. Surgery is indebted to you, Sir,
 “ for a remedy, the effects of which seem to have
 “ no bounds. For my own part, I am very sen-
 “ sible of my obligations to you, and beg leave
 “ to assure you of the sincerity and attachment
 “ with which I am, &c.

Signed, TAIGNON”

In 1747, the Marquis de Paulmy, Minister at War, sent my receipts for the Itch to the different hospitals in Flanders, to Dunkirk, Bethune, Arras, Douai, Gravelines, Lille, &c.

It appears, that at Dunkirk, of sixteen treated after my method, in the Itch, all were cured from fifteen to twenty days, including the preparations of bleeding and purging, as is attested by Mr. Ybuankouc, M. D.

From the account sent from Lille to the Minister, dated the first of March, 1757, by Mr. Plaintegu, surgeon-major, and examined by

By the Chevalier de Boncourt, Commissary at War, it appears that none of the patients were cured by my method of treatment under twenty, twenty-five, and thirty days. In short, Mr. Plaintegu does not condemn it, and finds no other inconvenience from it than retarding the cure for some days, and acknowledges that it is less disagreeable than the ordinary method: "Besides, says he, the linen of the soldiers was perhaps less stained."

By the list sent from the military hospital at Douai to the Minister, the 27th of March, 1757, by Mr. Lanoy, physician to the above hospital, it appears, that a soldier was rubbed with the Vegeto-mineral Water seventeen times, and cured.

Another six times, and cured.

Another five times, and cured.

Another seven times, and cured.

Another eleven times, and cured.

Another seven times, and cured.

Another four times, and cured.

Another four times, and cured.

Another four times, and cured.

Another ten times, and cured.

Another thirteen times, and cured.

Another nine times, and cured.

Another four times, and afterward blooded again, and again purged and rubbed.

It may be observed from the annexed accounts, says Mr. Lanoy, that some patients have been cured in a very short time, others more slowly, and some required bleeding and purging again. That depends, according to the remark of that judicious physician, upon the kind and duration of the Itch: For such as had lately contracted it, were cured in a few days; but it proved more obstinate in such as had been troubled with it for some months. The same may be said of those patients who laboured under some other disease, together with the Itch, as continual or intermittent fevers: the cure of these was not so speedy, and it was necessary to prepare them by the remedies commonly prescribed for purifying the blood; such as decoctions of the roots of barnada, china root, æthiops mineral, and such like.

The observations which were made by order of the Minister in the hospitals of Arras and Bethune, deserve to be placed here at full length. We will begin with those sent to Court from the first of those hospitals by Mr. Durand, who attends them; and we will afterwards give those that were communicated by Mr. Darquies, surgeon-major to the regiment of Bethune, the 4th of March,

1757.

O B S E R V A T I O N of the Physician of the
Hospital of Arras.

THE use which has been made in the Military Hospital of Arras, of a remedy sent down by the Court under the name of the Extract of Saturn, for the cure of the Itch; has had all the good effects that could be expected from it; if we except only a certain number of soldiers, on whom it took no effect; from which there was reason to suspect, that some other disease might have been joined to the Itch. Nor was this a mere conjecture; for by the use of baths and frictions on the wrists and hams with mercurial ointment and æthiops mineral, a ptisan of the root of bardana and lapathum, they were entirely cured.

The present account given by me, physician to the said hospital. Arras, the 1st of August, 1757.

DURAND.

O B S E R V A T I O N of the Surgeon-Major of
the Hospital at Bethune.

THE well known effects of the Extract of Saturn perfectly answer the author's intention; always supposing the use of it to be preceded by bleeding and physick; as these are necessary preparations for disposing the blood to be benefitted by this remedy. I have observed, that of forty patients with the Itch, who were treated with this medicine, some were cured the 6th, the 8th, and the 10th day; none exceeded the 16th. I have farther observed, that they were all cured by a copious perspiration; and upon that account I preferred the administering it at night, when the patient went to bed. For it is well known, that the two kinds of Itch, both the moist and the dry, are seated in the glands of the texture of the skin, and that nothing can more conduce to its cure than a copious perspiration, which is always promoted by the warmth of the bed.

The Extract of Saturn is an active, searching medicine; whose fine, penetrating particles divide the itchy concretions, and cause them to transpire through the pores of the skin, by means of a copious sweat, which is brought on after every friction.

It is finally our opinion, that this much approved remedy seems the most efficacious, and the only one hitherto discovered, that ought to be made use of. Such is the result of the Observations made upon the effects of that remedy in the Military Hospital at Bethune. Bethune, the 4th of March, 1757. Signed, DARQUIES, surgeon-major to the Hospital.

OBSERVATIONS of Mr. DORLIMONT,
Surgeon-Major of the Royal Hospital at Gravelines,
transmitted to the Court the 1st of April, 1757.

UPON the Court having done me the honour to send me a letter from Mr. Goulard, surgeon-major of the Royal Hospital at Montpellier, in which the author makes public the composition of his Bougies, whose basis is the Extract of Saturn, I carefully followed his directions with great success.

I was already acquainted with the virtues of the Vegeto-mineral Water, by having made use of it to great advantage in the cure of ulcers in the legs, which prove very obstinate in this part of the world. The following is the composition I have made use of for these seventeen years past; during which time I have had the honour of being surgeon-major of this place.

Take four quarts of forge-water, two quarts of good vinegar, and two pounds of litharge of gold: boil the whole together down to five quarts. Then let it settle, and pour the liquor into bottles well corked for use. When I have a mind to use

use this liquor, which may be called Saturnine-Martial Water, I begin by warming it, and then dip the compresses and pledges into it, which I apply to the ulcers as warm as possible.

In regard to the Itch, upon Mr. De Chateau-villars's communicating to me the contents of a letter from Mr. De Caumartin, on the new method of curing this disease, I followed the directions, and above thirty soldiers of the battalion of Saint Lo, and as many more of Fisher's, have been entirely cured.

But, to make a farther experiment, I washed the lard with the Saturnine-martial Water, and then anointed the patients with it; by which means they were more easily cured. Perhaps the ferruginous parts, mixed with those of the Lead, are better adapted for removing more speedily obstructions in the cutaneous glands.

Gravelins, April the 1st, 1754.

DORLIMONT, Surgeon-Major of the Hospital.

R E M A R K S.

IT appears from the cures performed in the above hospitals and those in the military one at Montpellier, wherein more than 2000 soldiers have made use of the Extract of Saturn, that this medicine ought to be considered as the true specific for the treatment of the Itch. In our first experiments, we mixed it up with lard: but we are since convinced by a multitude of facts, that a mixture of the Extract of Saturn with common water, and a little brandy, is sufficient to cure the Itch. Nevertheless, to hasten

the scaling off the itchy eruptions, a little sea-salt, and allum in powder, may be added to the Vegeto-mineral Water, as we shall direct in the Formulae.

This method may be looked upon as the most perfect for the cure of the Itch, and the most likely to answer the intentions of the Ministry; for in case it is followed, it will not be necessary to send the soldiers to the hospitals, which will be a considerable saving to the King; seeing it will be sufficient to rub the patients with the Vegeto-mineral Water at home.

Our remedy has this advantage in particular over others, that the fine particles, of which it is composed, are more easily introduced into the source of the itchy leaven; and consequently we see the eruptions increase from the first day it is used, to the fourth or fifth day, after which they dry away. Mr. Imbert, Chancellor of the University of Medicine, and Inspector of the Hospitals, appears to be convinced, by the multiplication of the itchy eruptions, that this remedy is possessed of a quality directly opposite to repulsion, which has been injuriously attributed to it. When the Itch is entirely manifested upon the skin, this medicine acts by perspiration, which is particularly heightened in the night: a new proof of the virtue which Mr. Imbert acknowledged it to have; and the effect of which, far from repelling, opens, searches, and attenuates

tenuates the itchy leaven; encreasés and brings out the eruptions; sometimes favours a gentle, and sometimes a copious transpiration; but always acts with a force proper for dissipating the itchy matter. More than 2000 itchy patients having been cured by the effects of this application, without the least inconvenience resulting from it, prove that those who met with accidents in the treatment of some others, were mistaken in some essential point of the prescription which I have given. This is the opinion we ought to entertain of the method employed by the anonymous author of the last Observations transmitted to me by Mr. Chenevieres, by order of the Marquis de Paulmy.

I will rest the proofs of the mild action of this remedy, and its dispersing, penetrating, and anodine quality, upon the Observations which have been made in the hospitals of Lille, Dunkirk, Arras, Bethune, Douai, and Gravelines; and on the perfect and radical cure of all the itchy patients on whom it was tried. The physicians and surgeons who attended them give it great commendations. In one of these hospitals alone, it is said to have retarded the cure; but not one of the Observations upon the occasion has remarked, that this remedy was subject to the inconveniences with which the author of the last Observations charges it. It is really surprising, that in the treatment of seven itchy

patients of which he has given an account, it should have been attended with so many revolutions, so many abscesses and colics, and so many other accidents, which certainly have nothing in common with the effects of our medicine. We must do it this justice, when we are supported by thousands of facts against its repelling quality. By what law of causes and effects should this remedy prove so successful in the cure of so great a number of itchy patients as I have attended since the month of November, 1756, and in the hospitals of Flanders, and be so unfavourable in the seven cases which the author of the last Observations mentions? We beg that the Minister will be so good as to attend a little to this last Observation. The consequences drawn by the same Observator are apparently well grounded, though entirely false in effect, He looks upon the Extract of Saturn to be a dangerous medicine, and attributes to it all the violent accidents which attended some of his patients. I can only add, in opposition to the long detail he has given of them, a list of effectual and speedy cures, compleated without the least inconvenience, both in our hospital under the eyes of Mr. Imbert, our Inspector, whose attestation ought to be decisive, and in others where it was used for the Itch. The repelling quality which the above-mentioned author attributes to our remedy, is incompatible with its known effects. The history of

of its sucœfs would fill many volumes; and I can say with great truth and satisfaction, that it has been the means of removing the prejudices of many celebrated physicians and surgeons in this University, who were formerly inclined to rank the Extract of Saturn among repelling medicines. In a word, it is the great external remedy used in this city, so celebrated for the art of healing, as well as in others, for the cure of external or chirurgical diseases, in which repellers must be greatly hurtful; wheareas ours daily produces such effects as surprize the masters of the art, who are not to be imposed upon, and were not convinced before they saw a thousand proofs of its efficacy.

The same author in his Observations, to decry the Extract of Saturn, has drawn an argument from the accidents that happen to the workmen in lead-mines: but though he agrees with the rest of mankind, in recommending mercury as a specific in the venereal disease, he takes no notice of the fatal accidents to which the unhappy victims condemned to labour in the quicksilver mines are daily exposed. It is nevertheless certain, however good their constitutions may be, that they never exceed four years, without being seized with tremblings and contractions of the nerves, involuntary spasms of the muscles, habitual and often mortal palseies. However, from these mines, whose effects are so pernicious to such as work in them,

is drawn the specific for the venereal disease. Now is it not evident, that the accidents which befall the workmen employed in the lead and quicksilver mines, are less the effects of these minerals than of the arsenical and heterogeneous particles that are mixed with them?

Whoever would be convinced of the existence of those heterogeneous substances, need only take mercury, as it comes out of the mine, and then pound it with a wooden pestle in a marble mortar full of water; and it will be found, that a brown powder will be seperated, and fall to the bottom of the mortar, which will come away with the water, when poured off.

Mercury, thus prepared, produces effects known to all the world, by curing the most obstinate venereal diseases, without any inconveniences ever resulting from it, when administred by able hands. I do not exaggerate, when I assert, that I never lost one patient, amongst the many thousands that I have attended in the Royal Hospital and at home, by the bad effects of mercury; which was undoubtedly owing to the attention I gave to the due preparation of it.

Now, do not the salutary effects produced by mercury, nicely seperated from all heterogeneous matter, authorize us to say, that the same resources may be found in the Preparations of Lead for other complaints, if the like care is taken to have it well purified before

before it is made use of? Such a preparation is that which follows from an ebullition of litharge with vinegar, of which the Extract of Saturn is the result, employed under the different forms we give it; and which performes cures every day, which the most eminent of the profession cannot behold without astonishment.

It must be observed, as an essential circumstance, that the strongest vinegar is the most proper to dissolve the litharge; on which account we shall particularly recommend that of Roussillon and Languedoc.

It is not less important to remark, that the boiling of the litharge with the vinegar ought to be continued an hour and a half, as I have mentioned in my letter to Mr. De La Martiniere, dated in the year 1751; and likewise in a Memoir read the same year to the Royal Society at Montpellier. An ounce of the Extract of Saturn and as much brandy should be put to a quart of common water, which ought to be used, generally speaking, two or three times a day, in the appearance of the Itch, during the four or five first days: But when the eruption seems to be compleat, and tends toward a turn by drying away, to every quart of water, composed as above directed, should be added an ounce of sea-salt, and an ounce of allum in powder; which is to be used as above. It may not be improper to observe, that this addition is not absolutely necessary

for the cure of the Itch, and that it only serves to accelerate it.

We should add, that the action of our remedy ought to be assisted by a certain degree of heat, as was observed by the surgeon-major of the hospital of Bethune: and as I myself had formerly remarked to Mr. Imbert, Inspector of the Hospitals, and other physicians and surgeons, who did me the honour to follow me in my visits. This will not appear surprising, if it be considered that the principal effect of our remedy consists in bringing out the itchy matter through the pores of the skin; so that its action ought naturally to be favoured by heat, to procure an abundant transpiration.

However, I have not pretended to assert that my medicine would cure the Itch when combined with the venereal disease, king's evil, or scurvy, as the author of the last Observations seems to insinuate.

No body is ignorant, that these diseases require a particular method, and appropriated medicines. There is room to judge that this author is no practitioner, and that he has been betrayed by weak authorities into an esteem of the remedies he proposes. Can he in effect blame the Extract of Saturn, because he believed it to be a repeller, while he recommends an ointment made of allum mixed with hog's lard? But no body has the least doubt of allum being an astringent and repeller, though perhaps they have doubted of

of the method by which the Extract of Saturn has operated. Would any one now, with the author of these Observations, propose the ointment of Citrinum for the treatment of the Itch; There is nothing, in effect, more dangerous than the solution of mercury in aqua fortis, although it be mixed with lard, and used only in external applications. The same must be said of the precipitate of mercury, of which every one knows the effects.

We hope that the author of the Observations will change his sentiments upon the effects of the Extract of Saturn, when he has examined without prejudice all that I have said to subdue this error, in the course of this work.

Lastly, it is with the Extract of Saturn as with mercury, and all other excellent remedies; it must be used with judgment, to render it serviceable: and I willingly acknowledge, that a misapplication of it may be attended with danger. But I beg at the same time, that I may be permitted to have recourse to the authority of the Minister, to make the efficacy of our remedy appear in all the cases for which I recommended it.

The difference in the time of curing the Itch depends upon its quality, duration, the number of pustules, the state of the blood, complications, and, lastly, the state of the weather.

In general, the military and pustulous Itch are cured in a very short time.

The Itch in the beginning, where the eruptions are not as yet entirely manifested, requires some days more for a cure.

The scaly Itch takes a little more time in the cure, because it is not sufficient to destroy the cause. But we must also attend, after the fall of the scales, to the restoration of the epidermis.

The Itch that is at the same time scaly and like a Tetter, requires still more days; because we have not only the leaven of the Itch to subdue, but also that of the Tetter.

If the venereal disease, scurvy, or the like complaint, be complicated with the Itch, this complication must be attended to, and must direct us in the method of cure.

When the blood of those in the Itch is extremely heated, fizzy, and acrimonious, we must be very liberal in the use of sweeteners, coolers, diluters, and domestic baths.

Experience has convinced us, that the cold weather is not at all favourable to the treatment of the Itch, because it shuts up the pores of the skin, and retards consequently the transpiration of the itchy leaven, when it is attenuated in the milatary glands by the action of our metallic remedy.

Although it may appear that patients in the Itch were cured at Lille, in Flanders, sooner by the common method than by the Extract of Saturn; yet to decide equitably

of

of their respective merits, it would be necessary to make use of both methods at the same time; for the success of the common method, when employed in warm weather, will not ascertain its superior excellence, when compared with our's. For it is certain, as I have already remarked, that the season of the year retards or favours the cure of the Itch, in whatever manner it is treated; and we may venture to say, that the experiments made with our medicine were neither assisted by a favourable season or climate; for as the country was northerly, the cold must have been more considerable, and consequently retard the cure, unless the rooms of the patients were carefully warmed. Without doubt, all these circumstances were more favourable in the other hospitals, where the cure was effected in less time.

Whatever remedies are made use of for the cure of the Itch, the same variations will occur, with this difference, that by the use of our remedy the cure is sooner completed (supposing every other circumstance parallel); except when repellers are made use of, which, by driving back the itchy leaven, cause the eruptions to disappear, and lay a foundation for fatal consequences: such, for example, as must be the effect of allum water, when made use of in the beginning of the disease.

C H A P. IX.

On Ruptures.

O F all the branches of the art, there is perhaps not one that has been carried to that degree of perfection as the treatment of Ruptures, and that so evidently demonstrates the superior excellence of modern surgery over that of the antients. I shall not enter into a detail of the different kinds of Ruptures, nor of their various cures. Such as are desirous to perfect themselves in the knowledge of this important branch of the profession, may consult the different authors who have published very elaborate treatises on this subject; but particularly the excellent work of Mr. Arnaud, and the Memoirs of the Royal Academy of Surgery. I shall confine myself in this place to some short remarks upon external applications, the nature of the strangled intestines, and the operation of reducing the intestine.

Belloste is, I believe, the first who made it appear, that emollients were hurtful in Ruptures with strangulation. He had, however, made use of them for thirty years, and afterwards banished both them and oily applications, which he looked upon, with reason as pernicious remedies. I am of opinion, how-

however, that the Vegeto-mineral Liquor, or oxycrate, is preferable to ice and snow, which are recommended by Belloste.

With regard to strangulations, I am persuaded that when they begin there is no inflammation, and that there only then exists an inflation of that part of the gut which is engaged in the ring. This inflation of the gut is occasioned by a rarefaction of the substances confined in this portion of the intestine; and which is the cause that the gut cannot be pushed back through the opening of the ring, which now is become too small. This cannot remain long in this situation, before the vessels of the strangled intestine swell, and thence follows an inflammation. I am not however of opinion, though it is generally supposed, that the ring, which is thought to be inflamed, contributes of itself to the strangulation. I rather look upon it, in this case, as a cord upon the stretch, that is not susceptible of relaxation, whatever applications are employed to procure it.

By what I have said, it is easy to perceive, that we ought essentially to attend to a diminution of the size of the intestine; seeing it is to the increased volume of it we are to attribute the impossibility of returning it into the abdomen. Now the remedies I have recommended above, I mean the Extract of Saturn in Water, or oxycrate, are the most proper to answer this indication; and the shortest reflection is sufficient to shew, that
emol-

emollient, by relaxing the coats of the intestine, cannot but render it more susceptible of extension, and consequently favour the strangulation.

The taxis, or the operation by which we reduce the intestine, is more difficult than is imagined; and I have seldom seen a surgeon acquit himself with success, especially when it is attended with strangulation.

I shall now lay before the reader the manner in which I have been accustomed to proceed in the reduction of the part.

After having placed the patient in a proper situation I put one hand under the thigh of the affected side, and apply the other upon the tumour. These two hands act in conjunction by gentle and easy movements. The air returns at first but in a little quantity, and the swelling decreases but insensibly; however, we must not be too hasty in the operation, as we should only put the patient to violent pain, without effecting a reduction of the parts. But as the operation, performed in the manner I have directed, lasts a considerable time, and very much fatigues the surgeon, I am relieved occasionally by an assistant, to whom I recommend simply to support the parts in the same state in which I left them. When I have recovered myself from the fatigue, I return again to my work, and go on in this method till I have made the intestine recede. I can venture to say, that by proceeding thus with circumspection, I have

have often succeeded, without giving the patient pain, in cases where many others had failed. I reflect with pleasure, that I once gave relief to a Professor of Physic in this city, at a time when every one thought his life in danger.

The following Observations will help to support what I have advanced upon the subject.

O B S E R V A T I O N I.

I WAS sent for to Nimes, in the month of July 1750, to see Mr. Teitie, Lord of Marguerite, aged eighty-four, who for three days past had a Rupture with strangulation. The physicians and surgeons had applied the emollient cataplasms generally made use of on the occasion. My first care was to attempt the reduction of the intestine; but not succeeding in my attempt, I replaced the former cataplasm, and we consulted on the most adviseable methods to be taken, to rescue the patient from the imminent danger he was exposed to. The gentlemen my associates consented to an application of vinegar and water, for want of the Extract of Saturn: one part of vinegar was mixed to three parts of water. I caused compresses, dipped in this mixture, to be applied to the tumour; these were carefully moistened every half hour, from eleven o'clock in the forenoon to six in the afternoon; at which time the gentlemen of the consultation returned. On removing the dressing, we found the tumour diminished one half. I made a second effort to reduce the parts, in which I succeeded. The patient cried out, I AM CURED; and he actually was so.

OBSERVATION II.

*Communicated by Mr. VIVEZ, Master-Surgeon of this
Ville-Franche.*

ON the 24th of April, 1758, I was sent for to a man who had an inguinal Rupture, with strangulation, which I perceived to be only an entero-celle. After having tried to reduce the part without success, by the application of the common remedies, such as emollient cataplasms and fomentations, I had at last recourse to the Vegeto-mineral Water. The effect of it was such, that in six hours time the hernia receded of itself, and the patient was perfectly cured.

OBSERVATION III.

By the same.

I WAS sent for the 15th of July, 1759, to a man who had a hernia, with strangulation, joined to a cirsocelle. Emollient cataplasms and fomentations, domestic baths, and other like remedies generally prescribed, had no effect. But by a continued application of the Vegeto-mineral Water for eight or ten hours, the parts retreated, and the patient found great relief from the cirsocelle for a long time after.

OBSERVATION IV.

*Communicated by Mr. SIMON, Surgeon to St. Elias's
Hospital at Montpellier.*

ON the 16th of August, 1755, one Saint Aignan, serjeant in the Royal Regiment of Roussillon, came to St. Elias's Hospital, having a hernia, with strangulation on the right side, a considerable tension of the lower belly, with a vomiting of chylous matter, which had continued for three days. He was

was frequently blooded, and cataplasms made with the pulp of emollient plants were applied with so little success that the patient lost his strength, and his situation became more and more alarming. A consultation being called upon the occasion, the operation was resolved upon. I desired they would give me leave, before they proceeded farther, to try an application of ice on the parts affected; which was consented to. The ice remained ten hours on the hernal tumour, at the expiration of which the parts were found to have receded of themselves: I supported them by a bandage, and the patient was perfectly cured.

This Observation confirms what I advanced of the strangulation, in the beginning of this Chapter. For it is certain, that the application of the ice could never have effected a dissipation of the tumour, without considerably diminishing the volume of the parts, and thereby lessening the proportion betwixt them and the opening of the ring, through which they had found a passage. However, notwithstanding the success attending the application of the ice on this occasion, and the Observations of other authors, I cannot help thinking such a remedy sometimes dangerous, and therefore should prefer the Vegeto-mineral Water; or, in want of that, a mixture of vinegar and water.

O B S E R V A T I O N on the Reduction of a
Bubonocello, with Strangulation, after four days and
a half.

On the 20th of October, 1759, I was sent for to a blacksmith in my neighbourhood, who had had a hernia, with strangulation, for four days and a half, occasioned by a violent exertion at his trade. He said nothing of it to his family. The intestine was forced out, notwithstanding a bandage which he wore. He thought he could reduce it himself, as he had frequently done; but a nausea and colic obliged him to send for me. I reprimanded him for not doing it sooner. I undertook the reduction, by the method above described; and I was the more pleased, after a great deal of fatigue, to find, that not only the hernia was reduced, but likewise that my opinion of reducing hernias by degrees was confirmed by this difficult operation.

O B S E R V A T I O N communicated.

MR. VIVAREZ, master-surgeon of St. Hippolitus's Hospital, made use of the Vegeto-mineral Water for the reduction of an hernia, with strangulation, which had baffled for many days together the application of emollients. It was a crural hernia, and the woman who had it was fourscore and seven years of age. This surgeon asserts, that he never saw such immediate effects from any remedy as he did from ours, which made the hernia recede almost immediately.

C H A P. X.

On the Piles.

IT is well known that the Piles are swellings of the veins, which surround the anus. This disease is produced by a viscosity of the blood and lymph, an obstruction in some of the intestines of the lower belly, or an irritation therein, occasioned by the excrements being very hard, and of an acrimonious disposition.

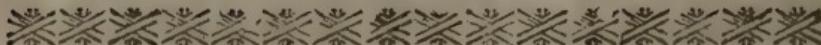
This hardness is so considerable in some subjects, that the fœces may be considered, in the efforts that are made to go to stool, as a solid wedge, which is strongly pushed downwards by the combined action of the midriff and muscles which surround the abdomen, and which acts with violence upon the sides of the rectum, and forces into the hæmorrhoidal vessels a super-abundance of blood, which insensibly extends them very considerably. The Piles either appear externally, or are confined within; which difference has occasioned their being called external or internal. I have seen the last of an enormous size, and put the patient to as great pain as a woman suffers in labour, and that as often as he went to stool.

DURING my stay at Genoa, I was sent for to Padre Cuneo, a religious person, and Divine to the Archbishop of that city. He had the internal Piles, which he was obliged to push out every time he went to stool; and it is difficult to express what he suffered, both when they came out and receded. He could never be prevailed upon to submit to the operation; however, upon my representing to him the necessity of it, he submitted to it, and it was performed after the ordinary preparations in the following manner.

The Piles being forced outwards, I seized the packet, which was very large, with my hand, and cut off above half of them. The reason why I did not cut them all off, was to obviate the following inconveniences: It appears from experience, that when the whole packet is cut off by a circular stroke, the scar being contracted, and difficult to subdue, stops up the passage through which the excrements pass, as I have often had opportunities to observe. Besides, one need not be uneasy on account of the remaining part of the Piles, as by the flux of blood they die away; and this favours the dressing, as it does the placing a roll made of many pieces of lint fastened together above the parts that were cut. The operation finished, the patient was dressed according to art: two hours after, he had so great an inclination to go to stool, that the dressings were obliged to be taken off, and so violent an haemorrhage succeeded, that great danger might have ensued, had they not sent for me immediately to stop it. It was methodically dressed, and the patient was in a fair way of recovery at my departure from Genoa, in October 1748.

I shall not here relate any more Observations upon the Piles, because there is no practitioner who has not seen many cases of this kind, and is not convinced that the Piles are susceptible of prodigious magnitude, when precautions are not taken to hinder it. To answer this purpose, the use of sweateners, and a proper regimen, is necessary; as are likewise glisters, to prevent the irritations occasioned by the hardness of the fœces, as often as it is necessary to go to stool.

When the glyster is come away, I wash the Piles with the Vegeto-mineral Water, and then apply to them the Cerate, made with wax, oil, and the above Water. If the Piles are external, I wash them many times a-day with the Water, and then apply the Cerate. This method of treating the Piles has succeeded so well with me, that if I had collected all the cases wherein it had answered my expectation, the detail would be assuredly very long.



C H A P. XI.

Extracts of Letters and Certificates.

WE cannot take too many precautions to ascertain the effects of new-discovered remedies adopted by practitioners; and though the efficacy of that which I now present to the Public is ascertained by many thousand experiments, yet I thought proper to subjoin the concurring testimony of many of the profession, who have made use of it; upon which account I have placed the extracts of different letters I have received upon the subject, in a Chapter by themselves.

Extract of a Letter wrote to me by Mr. GUERIN, Member of the Royal Academy of Surgery, concerning the Extract of Saturn.

I AM extremely impatient to see your own Observations on the effects of your remedy: I am convinced, as well as yourself, that it is an admirable one; I myself have made use of it hitherto with success.

Extract of another Letter from the same.

As to the Extract of Saturn, I can assure you I have made use of it with great success, and that I continue to do so, in all kinds of cases. I have relieved

relieved at two different times two patients in the gout, with this remedy; and there is seldom a case I have not used it in, either as a lotion, cerate, or mixed up with different digestives: when used in the form last mentioned, I have observed that the most sensible wounds have become less so.

Copy of a Letter from Mr. VATRE, Master-Surgeon at Paris, and Surgeon-Major to the Regiment of Normandy.

I AM not in the least surprised, Sir, in following step by step the method which you have described in your printed letter to Mr. De La Martiniere, concerning the treatment of disorders of the urethra, at the effects I myself saw.

Mr. Daran has made a mystery of it. But you, who have an equal love for the art of surgery and the practitioner, have removed every difficulty, which before appeared insurmountable, in the treatment of this disorder. I am, &c.

Extract of a Letter from Mr. DE LA FERMIERE, Surgeon-Major of the Regiment of Navarre.

MY CONFRERES and self often talk of you: they are all partisans and admirers of ----. They make great use of your remedies with great success, as I do myself, and have allayed the effects attending some operations I lately performed at Strasbourg; and performed cures upon my patients with pomatum and liniments with which your Extract was mixed. I think you by no means stand in need of any evidence to prove the good effects of your remedies: you are yourself the best certificate. I am, &c.

Another Letter from the same.

ASK me no longer for any farther proofs of the excellency of your remedy ; it is beyond all doubt : you may have as many certificates as you please, concerning its miraculous effects. It is the true chirurgical panacea. There is no regimen without it, and in which it is not used with great success, for the dispersing of swellings and inflammations, even such as threaten a gangrene. I have always found it of very great service in the most desperate cases, used in baths, lotions, and pumpings. All my brethren, to whom I have mentioned the remedy, have related instances of its amazing efficacy : and chiefly our friend Mr. Cremoux, to whose merit you are no stranger. He has often related to me the cures performed either by himself or father ; but they are too numerous to recapitulate here : however, they are certainly not only a just eulogium, but a convincing proof of the efficacy of your remedy. The chirurgical art owes you its best wishes, and its most grateful acknowledgements. You have been able to new-modify an old remedy, and to render it useful in every complaint ; a thing never known before. I am, &c.

E X P E R I M E N T S successfully made with the
*Extract of Saturn, according to Mr. IMBERT'S
Method and Account, Chancellor of the University, &c.*

1. THE Vegeto-mineral Water in incipient ophthalmies.

2. Baths, injections, compresses wetted with the above Water, have cured very considerable phymoses, and even such as threatened a gangrene, which has screened several patients from the operation.

3. It

3. It has succeeded very well in every species of chancre; and some recent wounds, which required to be re-united, have been cured by its use, without coming to suppuration.

4. It has been used with great success in the cure of tetter.

5. In gonorrhoeas, where it was thought proper to stop the running.

6. Some have been cured by it of rheumatisms ; and they are actually trying it upon anchiloses and old ulcers.

I, Surgeon, trusted with the care of the Military Hospital at Toulon, for the venereal and wounded, during the absence of Mr. Boucault, certify that I have seen the good effects of the above experiments ; to confirm which, I have here-to set my hand.

Signed TOURNIES.

Toulon, May 28, 1757.

*Certificate of Mr. GUILLERME, Surgeon-Major of
the Royal Marines.*

I THE under-written, Surgeon-major to the Royal Regiment of Marines, do certify, That since Mr. Goulard has made the useful discovery of the virtues of the Extract of Saturn for the cure of the Itch, I have followed exactly the treatment in his hospital of near two hundred patients in that disorder: they were all radically cured, and in a much less time by the use of this remedy than by any other method, especially since the addition of allum and salt. Although it is above six months since they have left the hospital, not one of them has ever had the least return of the disorder; and all of them, without exception, have been free from those accidents which too frequently follow the common methods of cure, as imposthumes, very

alarming internal complaints, &c. The same remark has been made by many able physicians of his Majesty's hospitals. Such an experiment, added to the singular effect of this remedy, in increasing, on its first application, the itchy eruptions, very clearly proves, that it acts by no means as a repeller. Many other soldiers have experienced its good effects in inflammations, tumours, and tetterers, which had been proof against other applications, as well as in venereal complaints, when local. Given at Montpellier, this 12th of May, 1757.

Signed GUILLERME.

Extract of a Letter from Mr. BOUNHIOL, of the University of Montpellier, Physician to the King, &c.

SIR, the frequent experiments during the course of many years, which I have made with your Extract of Saturn, and the happy effects I have found from it, as well for internal as external complaints, have induced me to communicate an Observation to you, which is no less extraordinary on account of the nature of the complaint which is the subject of it, than of the surprising cure performed in great measure by your remedy; which makes me look upon it as a true panacea, and universal antiphlogistic medicine.

I shall not here particularize every case in which it has answered my intentions, both in point of efficacy and celerity; but shall take another opportunity, when I am at more leisure from business, to place things in a clear light.

I shall always think myself bound to thank you for the discovery of a remedy which performs wonders, when made use of with judgment. I am, &c.

Extract of a Letter from Mr.. ALYNGRI, Surgeon-Major of Fort Brescou.

I HAVE long, Sir, observed the admirable effects of the Extract of Saturn. The cures I have performed by its means are too numerous to be particularized here. I shall therefore only observe in general, that I have seldom met with a case in which it has not succeeded, either as a lotion, pomatum, or mixed with digestives. I have known it perform wonders in inflammations, wounds, ulcers, &c. But what has made me an enthusiast in its favour, if I may so speak, is, that I have cured occult cancers in their beginning, by the application of it.

Signed ALYNGRI.

Extract of a Letter from Mr. LAUMONT, Surgeon of the Royal Marines.

THE proofs which I have of the good effects of the Extract of Saturn authorize me to assure the Public, that it may be looked upon as a specific in all chirurgical diseases, which do not take their rise from any fault in the fluids. I have used it with success in the cure of tetter and the itch, contusions and sprains, of all kinds of ulcers, phymosis and paraphymosis, deafness, ophthalmies, and rheumatic pains. For all these complaints, I have used it in lotions, fomentations, pumpings, injections and cataplasms : In testimony of which I have signed this certificate.

LAUMONT.

Extract of a Letter from Mr. BRUGUIERE, Surgeon-major of the Regiment of Tour Du-Pin.

SIR,

I HAVE been honoured with your letter, in answer to mine. You observe very justly, that I had forgot to mention to you the surprising effects I had seen from your medicine, in the treatment of Gun-shot wounds. I shall now remark, that it seldom happens, during some part of the treatment of these wounds, but an inflammation comes on, either in the beginning or afterwards. No application has succeeded with me with greater celerity or efficacy than your Extract, applied by means of compresses, dipped into it warm, upon the part; which were carefully so far moistened from time to time, as to prevent their drying. Thus I have not only abated the inflammation, but likewise the pain. I have used it with great success for cicatrizing the above wounds: I have likewise frequently prescribed it in every species of inflammation and ophthalmia, taking care previously to modify it according to the disorder and part affected. This, Sir, is all I have to say on these disorders. If time permitted, I would give you a detail of each particular case; but business renders that impossible at present. Be assured of my best wishes, and that I am, Sir, &c.

Signed BRUGUIERE.

Extract

Extract of a Letter from Mr. FELIX, Surgeon-Major of a Man of War, the 30th of July, 1754..

Mr. Felix is a Creole, native of the Havannah; was apprentice to me, and then served in the Military Hospital here as under-surgeon. The following is the Extract of a Letter he wrote to me on his return from the Indies.

I CAN assure you with equal satisfaction and gratitude, that in my first voyage to Vera-Cruz I was compleatly happy. I performed many surprising operations, and cured many chirurgical disorders, the account of which would be tedious. All that I should say, Sir, is that I have often made use of your remedy, and even for the dressings after operations performed. The patients were soon relieved from pain, and so soon cured, that they could not say enough in commendation of your admirable Water. I have employed it with equal success at the Havannah, and acquired by it a reputation above all my brethren, who were witnesses of its efficacy.

Extract of a Letter from Mr. PAGES, Surgeon-Major to the Royol Hospital at Alais, on the general Effects of the Extract of Saturn.

YOU desire to be informed, Sir, whether I have made any observations on the use of the Extract of Saturn. I here send you those that I have hitherto made. As I have used this remedy for some time, I find it very proper for the dressing of old ulcers, for which purpose I put five-and-twenty or thirty

drops of the Extract in a tumbler of water, and wash them, with this liquor only, as many times a-day as necessary. I have frequently used it in inflammation of the penis, and especially for any little ulcer at the bottom of the throat, as a gar-garism. I prescribed the Extract last spring with success to two soldiers of the regiment of Langue-doc, whom I cut for the fistula in ano ; I employed the liquor for the injections, and wetted the first compresses with it : this method I continued till the cure was performed. I have likewise observed that this liquor abates much the inflammation of the eyes, as it does their watering.

Mr. Goutier, of the town of Aix, wrote me several letters, in which he speaks of the good effects of the Extract of Saturn for the treatment of many chirurgical disorders.

Mr. Creamaux, surgeon-major of the Dauphin Regiment of infantry, has also informed me, that he frequently uses my remedy.

Mr. Robert, master surgeon at Menerbes, informed me by a letter dated the 29th of November, 1757, that he was very well pleased with the Extract of Saturn, which he had successfully used in many complaints.

Mr. Menuret, M. D. makes great use of this remedy, as do the following persons :

Mr. Soulier, surgeon-major of the Regiment of Bigorre.

Mr. Solayres, physician.

Mr. Barthe, surgeon-major to the Royal Regiment Comtois.

Mr. Pechagut, an old officer of Infantry, has cured many diseases with this remedy.

Mr. Coste, M. D. at Agde.

Mr. Didier, surgeon-major to the Royal Corsican Regiment of Cavalry.

Mr. Bruguire, master-surgeon, and surgeon-major of the fort of Saumieres.

Mr. Simon. master-surgeon at Montelimart.

Mr. Durand, a surgeon-major of the navy.

Mr. Alyngri, master-surgeon of Cette, surgeon-major of the fort of Brescou.

Mr. Laumont, surgeon to the Royal Regiment of Marines.

Mr. St. Paul, surgeon-major of the Royal Hospital at Ostend.

Mr. Delan, surgeon-major of the Regiment at Bresse, from Rochelle, the 19th of July, 1755.

Mr. Selignac, surgeon at St. George.

Mr. Constresty, master-surgeon of Cette.

Mr. Roux, an old surgeon-major of the Regiment of Vaftan.

Mr. Segui, surgeon-major of the Brabant Regiment of Infantry, in Spain, the 10th of November, 1757.

Mr. Espinas the younger, surgeon to the Hospitals at Mahon.

Mr. Rolan, surgeon-major of the Regiment of Mailly.

Mr. Vidal Laroque, surgeon, has informed me, that they frequently make use at Mal-

tha of the Extract of Saturn for external complaints, with great success.

All the above-named practitioners have written to me at different times, and assured me how much they were satisfied with the effects of my medicine, and sent me the different Observations which are interspersed in different parts of this work.

I am well convinced, that it is likewise used in many hospitals, and with great success.

At Montpellier, both in St. Elias's and the General Hospital.

At Toulouse, in St. James's Hospital.

At Aix in Province, in different hospitals.

In the hospitals at Toulon.

In the hospital at Narbonne, and others, &c.

Besides, many physicians and surgeons make use of the Extract of Saturn.

At Montpellier, many professors of physic, and almost all my confreres.

These authorities, I think, appear sufficient to confirm the use of it, seeing it has seldom failed curing the disorders treated of in this work.

*Certificate of Mr. GIRAUD, Master-Surgeon at Montpellier, to testify the Cure of one Riouffe *.*

THIS is to certify, that I was sent for last autumn to bleed one Riouffe, wife of a baker in this town, and that this woman, who was greatly

* See the account of it in the Observation of a Cancer

EXTRACTS of LETTERS, &c. 177

afflicted, shewed me a considerable tumour in one of her breasts. On examining it with attention, I saw that it was an occult cancer, which proceeded from a schirrous tumour settled there for some time. This woman informed me, that she was going to try a remedy which my confrere, Mr. Goulard, had prescribed to her. Having occasion to see her two months after, I perceived the swelling dispersed, and no remains of the shooting pains she had complained of before ; and I learned that this alteration for the better was owing to the use of a cataplasm made with the Extract of Saturn, water and bread. But this cure, however extraordinary, surprises me less than it would many others, having been often witness of the good effects of the Extract of Saturn in different chirurgical disorders. Montpellier, the 31st of January, 1760.

GIRAUD.

Extract of a Letter from Mr. LAFERMIERE, the 11th of July, 1759.

MY brethren make great use of the Extract of Saturn in the treatment of gun-shot-wounds, and find it highly advantageous. They all look upon it as one of the first remedies for chirurgical complaints. Mr. Blein, an acquaintance of yours, told me that he had recourse to it in the case of Mr. Medrane, captain in the Regiment of Aquitaine Infantry, who had sharp pains along the spinal process of the neck, which proceeded from an anchilosis of the vertebræ, and that he was much relieved by it.

A Letter from Mr. PECHAGUT, an old Officer.

S I R,

I PERFORM miracles with the Extract of Saturn. My door is continually crowded with poor invalids, and I have the satisfaction of seeing them come to thank me, perfectly recovered. But I have been much surprised lately by the cure I performed on a child, who had a cancer on his cheek; to which I applied the pure Extract, and afterwards some butter, which had been washed in the Vegeto-mineral Water. In twelve days time the wound was healed, to the great surprise of us dabblers in physic.

Mr. Paul, a student of physic, having some years ago presented to the Ropal Society a paper on the remedies proper to dissolve the coagulum which appears like buff at the top of pleuretic blood, remarks, that he had used with great success our Extract of Saturn for dissolving this substance, reputed to be indissoluble by many celebrated authors. I begged of him to send an account of the experiment, which I here subjoin, as a confirmation of the dissolving and antiseptic quality which characterizes the Extract of Saturn.

NEXT to sal armoniac, I know of nothing which will dissolve this coagulum sooner than the Extract of Mr. Goulard. Half an ounce of this Extract dissolved a dram of coagulum in the space of four-and-twenty hours, and consequently more expeditiously than nitre and lime-water. But as this

this medicine can be administered internally only in drops, I put ten or twelve drops of it into an ounce and a half of water, with a dram of coagulum. After eight days it discovered no tendency to solution, and still floated in the liquor, in the form of a membrane; but being curious to see whether it was no softer, I found that it was much so. Its natural viscosity was so far diminished, that I could easily reduce it to paste by gently pressing it between my fingers, and in a few days it was entirely dissolved. I must here observe, that Mr. Goulard's Extract is not only a remarkable dissolvent, but likewise a powerful antiseptic. Ten or twelve drops of it, mixed with an ounce and a half of water, resisted the putrefaction of the coagulum more powerfully than half an ounce of pure vinegar could have done; and as to the pure Extract, it has already preserved the coagulum free from putrefaction these two months. Truth has obliged me to say thus much in favour of this remedy. But may it be used internally without danger? The numerous experiments made by Mr. Goulard induce every one to think so; and many celebrated authors are also of the same opinion.

Mr. Sarrau, Professor of Anatomy and Surgery, Member of the Royal Society, well known for his skill in his profession, having long made use of the Extract of Saturn, in its different shapes, has sent me the following testimony of its effects.

THE Public has great obligations to Mr. Goulard, for the discovery of a remedy, which, in its different shapes produces the most salutary effects in many cases. I myself have particular reasons to assure him in this public manner of my acknowledgements

ledgements, having by means of the Extract of Saturn conquered disorders which had before baffled all medicine.

I wish I could give a detail of the different cures I have seen performed by it ; but not having taken the precaution to collect them in writing, I shall only say in general, that it does wonders in ophthalmies, however inveterate they may be : that it not only calms, but prevents inflammations : that it promotes resolution, by exciting a copious transudation of the obstructed matter, and by no means acts a repeller, which some have advanced ; and having tried it with success in diverse cases, I have particularly found it a specific in all venereal infections which attack the genial parts, such as chancre, phymoses, swellings, and heat of urine. In testimony whereof, &c.

Montpellier, the 15th
of May, 1760.

SARRAU.

*An OBSERVATION communicated by
Mr. SALANSONE, M. B.*

ABOUT the middle of June, 1760, a friend of mine was afflicted with two tetterers, one of which occupied the inferior part of the right omo-plata, and the other the left hypochondrium ; they were both an assemblage of small pimples, very much inflamed, covering about the breadth of a crown-piece, and placed in such a manner, that each tetterer, especially the one of the hypochondrium, described pretty near a circle. The itching they brought on was insupportable, and in consequence of the least scratching, the heat of them was considerably augmented : they likewise gave rise to occasional shivering fits. From these symptoms I concluded that they were malignant tetterers, partaking a good deal of the nature of an erisipelas,

and

and that their virus was contiguous; for twelve hours after, by the contact only of linen, which had been used for one in the disorder, the disease had been communicated. To prevent the matter from entering the mass of blood, I prevailed upon the patient to lay aside the medicines generally prescribed upon the occasion, and to substitute in their room Mr. Goulard's Extract, which I knew was very proper for all disorders of the skin. The reputation which that gentleman enjoys, and which daily experience proves to be the result only of his merit, engaged the patient to try the Extract of Saturn. At the end of the third day from the eruption, and on the beginning of the fifth, the redness and itching entirely disappeared, the tetter began to dry away and fall off, and the patient was perfectly cured.

This observation, joined to others communicated to me on the excellence of this remedy, leaves no room to doubt of its being a specific in certain cutaneous eruptions; I mean, such as are produced by the virus of tetter; the itch, &c. &c.

A question has been proposed, Whether, in case of an universal itching, attended with an eruption, the patient might not be put into a bath composed of some of Mr. Goulard's Extract, to the colour and consistence of lac virginale?

The following Observation was communicated to me by Mr. Coulas, M. D. of the University of Montpellier, Member of the Academy of Sciences, a young physician of great merit. This observation presents us

two very interesting subjects. First, it proves by a striking example, that the Vegeto-mineral Water is not less efficacious in pains produced by spasm, than in such as are the effects of inflammation ; and then by reflections full of erudition, he confirms the doctrine which I have inculcated in the course of this Treatise, concerning the bad effects of emollients in all inflammatory tumours.

A GIRL of a hectic and bilious temperament was suddenly seized with a sharp pain in one of her feet. The complaint in the beginning was sup-portable, but soon encreased to such a degree as forced her to cry out. She suffered excruciating pains for some hours, before I was sent for. My first care was to examine the part affected, which to the eye appeared in its nataral found state : a tension or stiffness, however, might be felt : I asked her to what she could attribute the cause of her complaint, but could get no information from her. The uneasy situation of the patient did not admit of any farther enquiry or deliberation ; and I hastened to relieve her by the most assuaging applications. To this purpose I ordered the part affected to be rubbed with the ointment of marsh-mallows, to which I added soon after the oils of sweet almonds and camomile. Notwithstanding the use of this linament, the pain continued equally severe, and rather seemed to encrease. I then substituted some softening balsam in the room of the ointment of marsh-mallow, but still with the same success. The patient perceiving no relief from any of the applications, began to be greatly alarmed, and desired very earnestly I would give her something more efficacious. This I made no doubt of

of doing, by the addition of some anodyne drops to the liniment; but instead of mitigating the pain, this only served to encrease it, and the part began to grow very hot. The foot seemed to swell, and a slight redness, which covered the whole, gave me reason to apprehend an inflammation. But these fresh symptons disappeared, by relinquishing the above applications. Finding the pains were not to be removed by these remedies, I thought the best method I could take would be to administer opiates internally. Bleeding might have been advantageously used upon the occasion, had not particular reasons forbid it: I ordered her, in consequence, a narcotic julep; but still no alteration could be perceived for the better: such was the peculiar nature of the pain, that the remedies proper on such occasions, so far from contributing to mitigate it, served only to encrease its violence. What I had applied, hower, were the only topical remedies which appeared, as things were circumstanced, adviseable. The pain could be mitigated by anodynes only. The stiffness observeable on the part, which was the effect of a spasm, as I shall prove further on, seemed to authorize the application of emollients; and the intenseness of the pain could not admit of any medicine, which did not possess the anodyne quality in the highest degree. The inefficacy of this last remedy, I mean the narcotic, threw me, I own, into the greatest consternation; and whilst I was deliberating on the next step which would be proper to take upon the occasion, I luckily thought of trying Mr. Goullard's Vegeto-mineral Water. This I was the more tempted to do, having found by various experiments on others, as well as myself, that there is no pain, however severe, which does not yield so its application. To this purpose I ordered compresses to be dipped in the Vegeto-mineral Water warmed, which

which was no sooner applied, but the pain became supportable. This happy success convinced me that I had now hit on the specific; and the event soon confirmed my opinion; for on the second and third application the pain was removed, as by a charm. To prevent its return, I ordered the use of the Vegeto-mineral Water to be continued for some hours. This precaution I thought necessary, having observed that the pain returned, whenever the linen began to grow dry. By the continued use of this remedy, the return of the bad symptoms were prevented, and the part was so far strengthed, that the patient was able the day following to walk, and follow her ordinary occupations.

The case above related is a striking instance of the anodyne virtue of Mr. Goulard's remedy; and, in effect, is it not greatly anodyne, since it succeeded in a case where narcotics, which are looked upon as specifics when properly applied, so far from mitigating the pain, only served to increase it? May we not be allowed then to call it more specific than specifics themselves? Though this proposition may in general be looked upon erroneous, it certainly can by no means be so in the case we have just mentioned; Mr. Goulard is convinced by a multiplicity of experiments, that there is no topical medicine more effectual for allaying inflammatory fevers than his Vegeto-mineral Water. The fact I have just related serves to prove it no less efficacious in easing such as do not arise from inflammation; moreover, it proves it to possess a real antispasmodic quality.

What I have just advanced is easily demonstrated; which I hope to do by shewing, that this pain entirely proceeded from a spasmodic affection.
I. It came on all at once, without any apparent existence of an internal or external cause. This is well

well known to be the case of spasmodic pains; and the patient felt a tension and contraction of the part. 2. The person is subject to hysterical complaints, and sometimes feels such pains in different parts of the body, but principally in the breast and hypochondria, which leaves no room to doubt of the disorder having been originally occasioned by an hysterical affection, of which a violent spasm was the consequence; and as this affection would yield to no application but Mr. Goulard's, we must necessarily allow that medicine a true antispasmodic quality.

The bad effects of the anodynes, which had preceded the application of the Vegeto-mineral Water, and the spasmodic nature of the complaint, which had yielded to that medicine, serve to confirm a proposition of Mr. Goulard's, which will no doubt appear an extraordinary one to those who are governed by prejudice, and pay a greater deference to old errors than any modern matters of fact. But to come to the point. Mr. Goulard, in the excellent Treatise he is going to publish, is not afraid to advance, that the use of emollients for removing inflammatory tumours is attended with the worst consequences. Every one knows the danger of applying such medicines in an erysipelas, though looked upon advantageous in phlegmonous inflammations. Mr. Goulard, notwithstanding, is well convinced by repeated Observations, that they are no less dangerous in the latter. Here theory coincides with practice. In effect, the cause of tumours being nothing more than the force of the fluids being superior to the resistance of the solids, it is evident, that any thing which serves to weaken the latter, while the force of the former remains in the same degree, must necessarily either occasion a tumour, or add to its volume, if already existing. Now such appear to be the

the effects of emollients; it is therefore with reason that Mr. Goulard condemns their use in the treatment of tumours, whether phlegmonous, erisipelatous, or inflammatory. Let us next see from the case I have related, whether we cannot bring a fresh proof of the danger of applying emollients for the cure of inflammatory tumours. If these applications can ever be proper in such cases, it must be, where there is a spasmodic affection in the inflamed part. But even in such a case there may be pernicious, as appears by the fresh symptoms subsequent to the application of them in the present Observation. We may then from this draw a very safe and conclusive argument, That since emollients proved very pernicious in a case where they are principally indicated, their use ought to be absolutely banished in the treatment of inflammatory tumours, as Mr. Goulard remarks.

An EXTRACT from the Journal of Mr. VANDERMOND, of the Month of May, 1760.

OBSERVATION on an itchy Eruption, cured by a Preparation of Lead by Mr. MENURET, M. D. at Montpellier, and a Correspondent of the Royal Society.

A SOLDIER of the militia of Aix, in garrison at Montelimert, came in the beginning of August to the hospital of this town, at that time under my care. His whole body was almost entirely covered with large itchy pustules, but they were chiefly on his elbows and arms. These pustules being contiguous and ulcerated, were very disagreeable to the eye, and very troublesome to the patient. It was six months since the eruption first appeared; the ointment of sulphur had been often used without success. Upon this account I was resolved to try the

the Vegeto-mineral Water, which Mr. Goulard, a surgeon in great repute at Montpellier, had often used with success on the like occasion. In consequence of this, after the common remedies, I ordered the patient to take an apozem, made of cresses, fumitory, and the vulneraries from Switzerland, for some days: after which I made use of my remedy. The patient wetted the different parts of his body with linen dipped in the Vegeto-mineral Water: the ulcers were dressed with the ointment of roses, moistened with some of the above Water. The itchy eruptions from the first application, far from disappearing, increased. I saw with some degree of surprise this increase of pustules, which continued to come out for some days; but by the continued use of this medicine, the disorder dried away, and entirely disappeared. I do not pretend here to explain the singular effect of this remedy; I shall content myself with remarking, that it is unjustly deemed a repeller, and consequently laid aside in particular cases. But if I may be allowed to judge of its manner of action on disorders for which I have applied it, it has always appeared to me to act as a resoler and disperser.

OBSERVATION *on the particular Effect of the Extract of Saturn, used in a large Quantity, by Mr. CAVAILLON, Bachelor in Physic.*

SOME time ago a hard and indolent tumour seized one of my arm-pits, which I neglected at first; but in a few days it increased so much, as to incommod me, and make me fear the consequences. I thought it high time to apply a remedy. The dispersing and resolving quality which was well known to characterise the Extract of Saturn,

turn, and which was frequently made use of by an eminent surgeon, induced me to look upon this liquor as the best adapted to my case. I began by using it in a cataplasm, in the ordinary dose; but being impatient to disperse a tumour whose consequences I dreaded, I thought proper to add considerably to the usual quantity. From the second day, I put upon my cataplasm at least three times the ordinary quantity, and continued the application in this manner for three days successively. A few hours after I had applied the first, made in the above manner, I perceived the tumour inflame, and become soft at the point. This it continued to do till the fourth day, when I perceived the matter to have forced its way, and the part of my shirt which covered the arm-pit tinged with a discharge mixed with blood: this discharge had rather an acid smell, which probably had been communicated to it by the Extract. The matter did not all come away that day; some hardness still remained, which has since been entirely removed by the application only of rags, dipped in the Vegeto-mineral Water, made after my method, I mean very strong.

This Observation, says Mr. Cavaillon, deserves without doubt the attention of practitioners, as it teaches them a method of dispersing tumours, which are often attended with danger, and not easily dispersed by ordinary applications, though undertaken in their commencement: it behoves them to consider when, and in what quantity, it ought to be made use of.

E X T R A C T of a Memorial presented to the Royal Society, by Mr. COULAS, M. D. August the 14th. 1760.

IN the circumstantial account I published of the symptoms and progress of a complaint in my eyes

eyes, which I cured by the application of the Vege-to-mineral Water, I took notice, that emollient cataplsms, far from relieving the intense pains I suffered, only served to encrease them. This is an important point, and the more deserving of our particular attention, as it tends to establish a fact, the discovery of which has done more honour to its author, as well because it removes the prejudices into which some of our oldest practitioners have been betrayed, as because it furnishes the art of surgery with one of its most useful secrets. The Academy, already acquainted with the successful enquiries of one of its most zealous members, will naturally desire to know, what farther information I have to offer on the subject. Mr. Goulard, the gentleman in question, does not hesitate to assert, that the use of emollient applications, in the treatment of inflammatory tumours, must be attended with the most pernicious consequences. A long and authentic list of Observations, made in the course of a judicious and successful practice, are the proofs on which he grounds his assertion. The more important the discovery, the more firm and evident must be the foundations on which it rests. Though Mr. Goulard has supported his opinions on the best grounds and reasons, yet as nothing can more clearly demonstrate it than the evidence of facts and instances, I cannot think it improper to add some of my own Observations to those of this able surgeon.

If Mr. Goulard had not condemned the use of emollient cataplsms, the experience I had of their bad effects, when troubled with a violent inflammation of my eyes, would effectually discourage their use. If these applications could ever be made with success, I had the greatest reason to promise myself the most desirable effects. In the hypothesis of those authors who recommend them,

them, it must be allowed, that I had recourse to them on the surest indications. The inflammation of my eyes had gained an uncommon degree of violence; I suffered the most excruciating pains. The eye was so dried, that a tear never fell from it; and I felt a sensible contraction in the inflamed part. In these circumstances, who could have imaged that emollient applications would add to the violence of the disorder? Such, however, was the effect they produced.

Let it not be said, that the pernicious effects of those applications were owing to some latent cause in my particular habit of body. I am not afraid to advance, that they have not been more beneficial to other patients. I have had frequent opportunities to observe, that the use of them has not been attended with the desired success. I have been acquainted with several patients, who have suffered by the application of a cataplasm of apples, baked in the ashes, or boiled in milk. I have known others, who have found their pains increased by the use of veal. In a word, I had occasion to observe in the cure of one of my brothers, that the volume of the vessels of the conjunctiva was enlarged by the application of milk, and the pulp of quince-seeds, of linseed, and flea-wort. Again, I have taken notice that these applications never produced worse effects than when they were made on the most approved indications. Thus in the most inflamed state of my eye, emollients proved more hurtful than in the less threatening states of the disorder. I have made the same observation in other cases. Not only the evidence of plain facts demonstrates the bad effects of emollients, but the principles of a sound theory absolutely forbid their use. Let us see what light these principles afford towards illustrating the object of our present enquiry. In the inflammation of the eyes, the lymphatic

phatic vessels of the conjunctiva are stuffed with blood. This fluid is impelled into their cavities by a force capable of surmounting the resistance it meets with from these vessels. Inflammation is defined by Mr. Savage to be, that force by which the blood is pushed and impelled into the vessels of the part affected.

Having thus settled the principles, we come now to the consequences to be expected from the application of emollient cataplasms. The parts to which they are applied, are relaxed; consequently, the diameter of the lymphatic vessels is enlarged. What must be the effect? A greater number of the globular particles of blood, impelled continually towards their opening, will enter; the volume of the part affected must then be enlarged. This will naturally account for the increased violence of one of the symptoms of the inflammation; and we shall presently see that the rest increase in the same proportion. The redundant particles of blood, which have forced a passage into the inflamed part, having the same accelerated motion with those which had been introduced before the application of the emollient cataplasm, the vessels of the conjunctiva are now to sustain an increased power of action, since to the pressure of the fluid they before contained, must now be added that of the globular particles of blood, which have found an entrance in consequence of their distension. Now, as inflammation is produced by the increased velocity of the blood, and as the symptoms attending it must bear a proportion to this velocity, the pressure of the blood on the part affected cannot be increased, without adding to the violence of the disorder; therefore the application of emollient cataplasms, which was intended to subdue the inflammation, must necessarily increase its violence. And this is a truth clearly deduced from

Mr.

Mr. Goulard's Observations, and from those which we have just made.

But the increased violence of the inflammation is not entirely owing to its enlarged moles and encreased power of action, but arises likewise from another cause, which I will now explain. The adventitious globular particles of blood augment the resistance of the part to the circulation of the blood, which is continually impelled into the vessels of the conjunctiva. This encreased resistance must add to the violence of the complaint. To prove this, we need only observe, that the shock of the seconad, against the preceding column of blood, must now be more violent, and the efforts of the sides of the vessels more considerable. This observation is justified by experience. Thus the impression made by a body in motion upon another body, is proportioned to the resistance. A fly on the wing eludes the action of the most powerful agents, but is easily crushed by the body to which it opposes any resistance. Therefore the shock of the blood must be more violent when impelled into the inflamed part, where it meets with greater resistance.

Again, experience teaches that the pressure of fluids on the sides of the tubes is proportioned to the force with which they are impelled, and to the resistance they meet with in their motion: therefore, as the blood impelled into the vessels of the conjunctiva acts with greater force on that which it finds there, so it presses with greater violence on the sides of the tubes that receive it. But as the inflammation is proportioned to the impetuosity with which the blood acts on the part affected, all the symptoms of the disorder must be encreased; and as the action must necessarily be in proportion to the resistance of the inflamed part, it follows, that the blood, which is impelled into it by the application

application of emollient cataplasms, cannot fail to encrease the inflammation of the eye, which we undertook to prove. That these applications really produce the effect just mentioned, and that they act in the manner we have explained, may be gathered not only from what we have said above, but from the increased symptoms of erisipelatous tumours, when treated with relaxing cataplasms.

Among the many honourable testimonies which have been given to my medicine, I cannot refuse a place to one which I accidentally met with, in an Essay just published by Mr. Paul, a correspondent of the Royal Academy.

OF all the medicines I have used for dissolving the coagulum, no one has succeeded better than sal ammoniac; but I am not clear that this salt can be of any use in cases accompanied with inflammation; though Mr. Malouin, in his Treatise of Chemistry, gives it the preference to all other medicines in pleuretic fevers. Next to sal ammoniac, I have never met with a more powerful disperser than a combination of lead and vinegar, known by the name of the Extract of Saturn. We owe this discovery to Mr. Goulard, a surgeon of this city, who enjoys a distinguished reputation in his profession; and who proposes to favour the public with an account of the surprising effects of this excellent medicine. The great and extensive success he has met with from this application in the treatment of various ailments, causes it to be looked upon as one of the most valuable acquisitions made by modern surgery. The medicine itself is not new; but the use of it is an object so interesting and important, and yet so little known even

in our days, that the Academy of Surgery proposed it as a subject for the prizes for seven years together, from 1742 to 1749.

My connections with Mr. Goulard, the friendship with which he is pleased to honour me, and which I value as I ought, must not fix the imputation of flattery upon this tribute of praise, so justly due to his superior merit. My feeble voice only repeats what the public has long learned from the impartial breath of Fame, and must therefore be acquitted of the least suspicion of adulation. Let the hireling and the sycophant continue to bestow their panegyrics on empty titles, and to sound the names of those the highest, who are enabled by their wealth, and inclined by their vanity, to pay them best.

F O R M U L Æ.

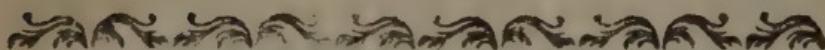
COMPOSITION
OF THE
EXTRACT of SATURN.

TAKE as many pounds of litharge of gold as * quarts of wine vinegar (if made of French wine the better); put them together into a glazed earthen pipkin, and let them boil, or rather simmer for an hour, or an hour and a quarter, taking care to stir them during the ebullition with a wooden spatula: take the vessel off the fire, let the whole settle, and then pour off the liquor which is upon the top into bottles for use.

I shall call his liquor the Extract of Saturn, which is to undergo a farther modification, as I shall direct. But I must first here remark, that if it is intended to give this liquor the common consistence of an Extract, it must be boiled some time longer, after its separation from the mass, taking care first to filter it through proper paper. By following this method, it will become thicker, and of

* 32 oz.

a reddish colour, and will be in every respect like any other Extract. I doubt much, whether an Extract of this kind can be drawn from the liquor of Saturn, which is nothing but ceruse, thrown into a matras, into which is poured distilled vinegar, and digested in hot sand. This Water of Saturn is different from the Extract of which I am speaking, and its effects must necessarily be less powerful and extensive. It is true, indeed, it is used against some kinds of inflammations, without its property being ascertained, as its effects are dreaded, being ranked, like other preparations of lead, among repellers: but I flatter myself, that the Public will lay aside old prejudices, when they have perused this work; which serves to prove, that there is no greater disperser than the Extract of Saturn, which appears to be only a very simple preparation of Lead; and which, modified after my method, daily astonishes the masters of the art with its effects. It is with this Extract I compose various topical remedies; and as I give it the preference to all others, for the treatment of almost all chirurgical disorders, I shall give a more circumstantial account of the various Formulæ, as is general on the like occasions. I shall remark still farther, that many of the various modifications I make the Extract of Saturn undergo, often agree and concur in the treatment of the same complaint. After describing each of the Formulæ, I shall specify the disorders to which it is applicable.



FORMULA the FIRST.

Composition of the Water of Saturn, or Vegeto-mineral Water.

NO composition is more simple than that of the Vegeto-mineral Water ; nor is there any remedy which acts with equal celebrity or efficacy. It is made by putting two tea-spoonfuls, or one hundred drops, of the Extract of Saturn to a quart of water, and four tea-spoonfuls of brandy : the quantity of the Extract and brandy may be diminished or increased according to the nature of the disorder, or the greater or less degree of sensibility of the part grieved.

1. The Vegeto-mineral Water is a known specific against all external inflammations, and particularly against those of the eye ; but when it is made use of for the latter complaint, great care must be taken not to put too much of the Extract of Saturn ; for an organ endowed with so great a degree of delicacy and sensibility requires particular attention. What follows is well worth every one's attention; for it is very certain, that the Extract of Saturn would not fail to irritate, if made use of in too great a quantity ; whereas, on the contrary, certain and immediate benefit will accrue, by beginning with it gradually. For example, put at first ten

or

or twelve drops of it to a common glass of water, and encrease them gradually, as the inflammation is seen to disperse.

2. Against fluxions of the membrane of the tympanum, and occasional deafness: taking care, in these cases, to add to the drops of the Extract, double the number of drops of camphorated brandy; though common brandy may be used, as for ophthalmies.

3. For the cleansing of wounds, and moistening the bandages and pledges, before they are covered with the cerate of Saturn.

4. By way of fomentation, after any surgical operation, and for removing pains in the side.

5. For washing of old, callous, foul ulcers, &c. See the article ULCERS.

For washing ulcerated and occult cancers. See the article CANCER.

Against contusions and bruises.

Against extravasation of blood, or ecchymoses.

Against a trombus, proceeding from phlebotomy.

Against inflammations of the tendons, aponeuroses, and ligaments.

Against phlegmons and abscesses, whether in their commencement, or after.

Against sprains.

Against excoriations.

Against burns.

Against the king's evil.

Against inflammations caused by gun-shot wounds.

Against fistulous sinusses.

Against fistulas, whether of the eye or anus, or others.

Against inflammations and curdlings of the milk in the breasts, abscesses and ulcers of those parts.

Against the erisipelas.

Against the piles.

Against chilblains.

Against an anchilosis.

Against a contraction of the tendons.

Against tumours and inflammations attending luxations and fractures.

Against whitloes.

Against tetter.

Against the itch.

Against ruptures with strangulation.

Against a gangrene, or wounds that threaten one.

In FOMENTATIONS.

Against accidental pains, and rheumatic ones.

Against inflammations of the mouth produced by a quinsey, or any other cause.

This water is to be made use of in summer without warming, or at most the chill taken off, and in the winter a little warmer.

It

It may be used by way of
Wash.

Injection.

Pumping.

Bath.

For moistening compresses.

Gargarisms.

It is likewise used in the composition of a Cerate, much hitherto wanted in surgery. I can say with great truth, that I have seen the most able Surgeons dubious in their choice of proper remedies for the treatment of different kinds of ulcers and wounds, which daily occur in practice: no one can be ignorant, how important such a choice must be, both in regard to the treatment and cure of them.



F O R M U L A E the S E C O N D.

Composition of the Cerate of Saturn.

T A K E four ounces of refined wax, and a pound of oil; melt them over a slow fire, taking care to stir them gently; let the whole cool; then put four ounces of the Extract of Saturn to six pounds of water: put the Vegeto-mineral Water, thus made, little by little, to the wax and oil, which must be put into a proper dish for the purpose; incorporate them well together with a wooden spatula, and take care to let the quantity of water you put in be thoroughly

absorbed, before you put in any more. By thus taking time, and carefully beating the whole together, you will thoroughly mix the water, wax, and oil *.

This Cerate may be made stronger or weaker, and occasionally mixed up with balsams and ointments, according to circumstances.

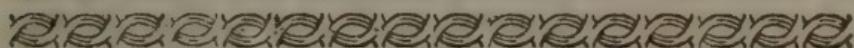
This Cerate of Saturn perfectly answers the views we ought to have, and the indications we ought to fulfil, in the dressing of wounds and ulcers. To prove this, I must refer the reader to the Observations ; by which he will perceive, that the metallic particles of which this remedy is composed, act efficaciously on the affected vessels, and add to their elasticity without irritating them ; that they cleanse and disperse tumours, change the nature of suppurations, even of such as are fetid and corrosive ; and ease pain, the general attendant of wounds and ulcers, especially when seated on tendinous, aponeurotic, and ligamentous parts.

See the celebrated Mr. Guerin's letter, and those of many other able practitioners.

Before I enter into a detail of the various cases in which the Cerate is to be applied, I think it proper to remark not only its superiority over other remedies, but the great

* It sometimes so happens, that the above quantity of oil and wax will absorb eight or nine pounds of the Vegeto-mineral Water.

advantage the different hospitals will reap from its cheapness; as one pound of this Cerate will not stand them in above six-pence; whereas there is no other medicine generally made use of in place of this, that does not cost at least five or six times as much. Besides its property of healing ulcers and wounds, it may be used with great success after chirurgical operations, against excoriations, redness and irritations of the skin, ebullitions, chapped lips, itchings, burns, and many other external complaints; as may be seen in the Observations.



F O R M U L A the T H I R D.

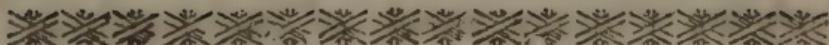
On the Cataplasm, or Poultice.

A MONG the various chirurgical remedies, none is more familiar to us, or more frequently made use of, than the Cataplasm; and it is no easy matter in general to decide, which of the many ought to have the preference. Emollient and relaxing ones, applied by themselves, as is generally the case, are often contrary to the indication we ought to fulfil, and seldom answer our intentions. Such as are of the resolutive kind sometimes succeed; but great judgment is required in applying them, otherwise they may be very prejudicial. This daily experience clearly demonstrates, when made use

of for schirrhous tumours inclined to be cancerous.

Our Cataplasma is liable to none of these exceptions, as it performs wonders in many cases, and particularly in confirmed schirrhous tumours, and occult cancers; as the Reader may see in the Observations.

Take some Vegeto-mineral Water, put it into a pipkin with crumbs of bread; let it just boil; lay a sufficient quantity of it on linen, and apply it to the part affected: this must be renewed three or four times in four-and-twenty hours; and every time it is taken off, care must be taken to wash the part with the Vegeto-mineral Water, and particularly the edges of the Cataplasma; because the bread being dried, often causes small cutaneous rednesses, which are of no bad consequence. When the weather is very hot, I frequently order it to be renewed every three or four hours; especially when it is meant to disperse hard, indolent, schirrhous tumours. We use it very advantageously for the cure of phlegmonous ones, even when suppurated; against such as are caused by the coagulation of the milk in the breasts, or by any other cause; against gouty tumours of the articulations; and against the inflammation of any part of the body; to prove which, I refer the reader to the Observations.



FORMULA the FOURTH.

Pomatum of Saturn, against Tetterers and other Cutaneous Disorders.

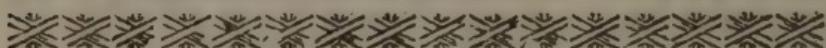
TAKE eight ounces of refined wax, melt it by degrees over the fire in a proper vessel; add to it eighteen ounces of oil of roses, mix the whole well together; put to this four or five ounces of the Extract of Saturn, taking care to mix them well together with a spatula; add a dram of camphor, which you must keep stirred till it is dissolved; take your vessel off the fire, and continue to work it together till it is brought to a consistency.

This Pomatum may be made milder, by diminishing the quantity of each ingredient, according to the cutaneous disorder you intend to use it for; you may likewise add, if you think proper, as much spring-water as Extract to the Pomatum.

This remedy is sovereign against tetterers, and many other cutaneous eruptions; sinous ulcers; fistulas; callous, scrophulous, scorbutic, and venereal ulcers. For the treatment of most of these complaints, you must wash the parts affected with the Vegeto-mineral water, and wet the first dressings with it, before you apply the Pomatum.

Particular care must be taken, when this Pomatum is made use of for old tetterers, which

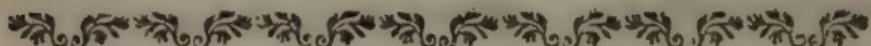
which are salutary drains of bad humours from the mass of blood, to order at the same time proper internal remedies. The strength of the Pomatum may be increased or diminished according to circumstances: we must likewise here remark, that it may be very advantageously applied to parts threatened with a gangrene.



FORMULA the FIFTH.

Nutritum of Saturn.

TAKE six ounces of litharge of gold, reduced to a very fine powder; put it into a mortar; mix five ounces of oil with this litharge; add eight ounces of the Vegeto-mineral Water, which you must pour in by degrees, and mix up with the rest. This Nutritum will be found to be more efficacious than the common one, as well against burns, as many diseases of the skin, and disagreeable itchings; it is besides a very great drier and disperfer.



FORMULA the SIXTH.

A Pomatum against an Anchilosis.

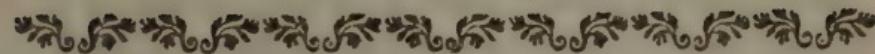
TO dissolve the inspissated sinovia in the articulations and sheaths of the tendons, to heal wounds near the articulations, I make

I make use of a Pomatum ; the effect of which has often surprized the masters of the art : the following is its composition.

Take two quarts of common water, put them into an earthen pipkin ; add two ounces of the Extract of Saturn, and eighteen ounces of common soap cut into slices ; throw them into the pipkin, and let them simmer over a gentle fire : keep the whole constantly stirred with a spatula, till the soap is dissolved ; then add a dram of camphor ; and when that is dissolved, take the vessel off the fire, and use the Pomatum in the following manner : Take some Vegeto-mineral Water, make it rather more than luke-warm, put it into a proper vessel, and apply it to the part, which you must rub with your hand, during the bath, for a quarter of an hour ; besides this, it would be very proper to pour the above liquor upon the part pump-fashion. After this, cover the part with warm linen ; and an hour after take it off, and apply the Pomatum, as you would the mercurial ointment : then take some silver paper, rub it well in your hand till quite soft, and cover with it the part affected ; apply warm linen over the whole. Renew this operation once in four-and-twenty hours, till the cure is compleat, which seldom exceeds fifteen or twenty days. You must take care to soften the Pomatum remaining in the pot with the Vegeto-mineral Water, to prevent its growing dry.

This

This topic was much wanted in surgery to remove an anchilosis, which was generally ranked among the incurable disorders. How often have I seen surgeons prescribe emollients, oils, and fats, for these complaints, which, so far from relieving them, only served to encrease the tumefaction! The Observations which have been communicated to me, and those I have made myself, on the effects of my metallic remedy, will help to prove, how specific this is to dissolve the inspissated sinovia in the articulations and sheaths of the tendons, which hitherto has been deemed impracticable. I have again a pride in declaring here, that it is to the Marechal de Richelieu we are indebted for the addition of the soap to the original composition. This nobleman, who applies himself to the study of every science, advised me in the year 1747, during my stay at Genoa, to make an addition of soap to the old prescription; thinking it would then be more efficacious to dissolve the inspissated sinovia. This conjecture was sufficiently verified by the cure of Madame Morande, who had been afflicted for six years with a contraction of the flexor tendons of the hand; from which she was delivered in fifteen days by the above application. See a circumstantial account of this in the Chapter on Anchilosés. This Potatum may be very advantageously used against schirrhoas tumours, and others, which from a long continuance become indurated.



F O R M U L A the S E V E N T H:

The Composition of the Saturnine Plaster.

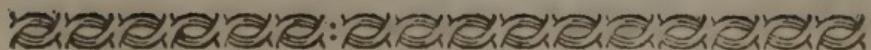
TAKE twelve pounds of wax, melt it in a proper kettle; add three pounds and a half of oil of olives: when the oil and wax are well incorporated, add eight ounces of the Extract of Saturn, which you must pour in by degrees, taking care to keep the whole stirred with a spatula; add to this two drams of camphor, which you must dissolve with the rest. Take the kettle from the fire, and dip linen into it of the length and breadth you think proper.

The Saturnine Plasters perform wonders, when applied to parts afflicted with rheumatic pains, which are by no means to be confounded with those that are seated in the bones, and are generally produced by a venereal cause; these are lodged too deep to be removed by this application: but parts that are weakened and full of pain, are much relieved by them: they are likewise of great service in the hospitals, especially at those times of the year which forbid the use of mineral waters, and in places which are distant from such waters. They may be very advantageously used in all cases in which the plasters called *Divine* are prescribed: but with this precaution, that the part afflicted must

must be first washed with the Vegeto-mineral Water, and at the same time gently rubbed: I likewise made use of them for the cure of anchilosés. After having anointed the part affected, for a certain space of time, with the Pomatum I have appropriated for this complaint, I then apply silver paper, well rubbed with the hand till it is quite soft, which I leave on for two hours, and then supply its place with the Saturnine Plaister.

I have already remarked, how advantageously I made use of the above Pomatum and this Plaister for an extraordinary contraction of the tendons of the hand. See my Observations; as likewise the case of Madame de la Gomercini, and that of the Chevalier Desquilles.

I shall not here trouble the reader with an account of the different complaints, as well rheumatic as others, for which I have made use of these Plasters with success, taking care, first, to wash or pump the part with the Vegeto-mineral Water. The combined virtues of the Extract of Saturn and soap cannot fail to produce the most salutary effects, upon account of their dispersing and resolving quality; especially when assisted by camphor, whose particles possess so great a share of volubility and action. See the Observations of many cures in which the Saturnine Plasters have been made use of.

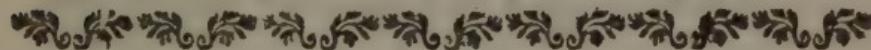


FORMULA the EIGHTH.

The Pure Extract of Saturn without any Modification.

YOU may apply the Pure Extract of Saturn now-and-then to the bottom of ulcers, when the suppuration is bad, and a gangrene apprehended: it is in general very efficacious to destroy fungous flesh.

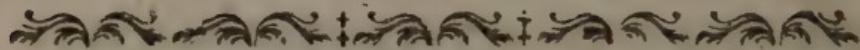
It may be likewise used against warts, pustules, pimples, and other excrescences appearing upon the body.



FORMULA the NINTH.

The Tripharmacum Plaster.

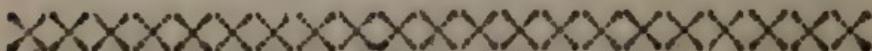
THE composition of this Plaster is of a very old date; an account of it may be seen in Bauderon's Dispensatory. Many practitioners have used it since, and particularly Mr. Faget, an eminent Paris Surgeon; who did me the honour, in the year 1751, to inform me of its surprising efficacy: he likewise sent me the composition, which I found in the above book.



FORMULA the TENTH.

The Simple Tripharmacum Plaister.

EIGHT pounds of litharge of gold, sixteen pounds of common oil, vinegar q. s. Mix in a proper vessel the litharge with the oil and vinegar; let the whole boil together (keeping it well stirred with a wooden spatula) to the consistence of a plaister. If you perceive the litharge not sufficiently dissolved, or the plaister not sufficiently boiled, add a fresh supply of vinegar.

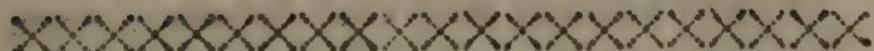


FORMULA the ELEVENTH.

The Compound Tripharmacum Plaister.

EQUAL parts of the simple diachylon Tripharmacum Plaister; put them together into a proper vessel, with a sufficient quantity of vinegar; boil the whole till the vinegar is absorbed, and the Plaister stiff enough to be made into rolls.

To give this Plaister a red colour, add to it, while in the vessel, some colcothar of vitriol reduced to a very fine powder.



FORMULA the TWELFTH.

On the Treatment of the Itch.

VARIOUS are the methods recommended by medico-chirurgical writers for the treatment of the Itch. Sometimes the medicines are of the repelling kind; sometimes astringent ones are mixed up with repellers: at other times corrosives are added; and the mercurial ointment is frequently used either by itself, or joined to other remedies, as the powder of white hellebore, &c. But the formula which is generally used, and the one which succeeds the best, is the mixture of flour of brimstone with oil or lard.

Sulphur is also frequently recommended. All these remedies, except sulphur and mercury, which have also their objections, are very dangerous; particularly such as are of the repelling and astringent kind; as they seem to contradict, and do contradict, in effect, the indication we ought to fulfil; as may be seen in my Chapter of the Itch, to which I refer the reader.

The following is a Detail of my Method of treating Patients in the Itch.

FIRST, they are to be blooded and purged; then care must be taken to wash all the

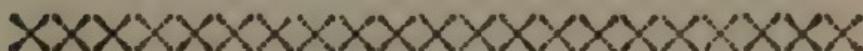
the parts affected with that disorder, morning and night, with the Vegeto-mineral Water warm. If the weather is cold, this must be done before the fire, and the patients put to bed. This method must be pursued for about four or five days. When the eruptions are very visible upon the surface of the skin, an addition of ingredients is to be made to the Vegeto-mineral Water; viz. to a quart of the above water, put half an ounce of common salt, and a dram of allum; by this means the Itch will dry away by degrees, and will be cured in about eight, ten, twelve, or fifteen days: I speak here of the miliary and pustulous Itch. Sometimes indeed it falls out, that some patients, who have been afflicted with it for a long time, are not cured quite so soon, when the Itch is in large blotches, and covers, as I may say, partly the whole body. When this is the case, we make use of the Vegeto-mineral Water without the addition of either the allum or salt.

When the Itch is of the tetter kind, it is to be washed for some days with the Vegeto-mineral Water; then it is to be anointed with a Pomatum made after the following manner:

Take two pounds of hog's lard, four ounces of sulphur, two ounces of allum, and two ounces of the Extract of Saturn: mix them all together thoroughly in a mortar, and apply them once or twice a day to the

the parts: when the disorder proves very obstinate, touch them with the pure Extract.

I must here make a remark, which is much to the advantage of the king, that the soldiers afflicted with this disorder may make use of this remedy in their garrisons, and even in their tents, without spoiling their linen, or observing any particular regimen. I have myself lately prescribed it to about fourscore in the Citadel. Many of them had both the ulcerated and tetterous species of Itch; notwithstanding which they were well in a short time; as upon an average the cure was compleated of them all under twelve days, without spoiling their cloaths. At the same time I cannot help remarking, that the cold was excessive, and the weather tempestuous; that they seldom kept within doors, and many of them lived upon very improper food, such as garlick, onions, indulging in the use of wine, tobacco, &c.



FORMULA the THIRTEENTH.

Powder of the Extract of Saturn.

IF you put the pure Extract into plates, and expose it to the sun, it thickens and becomes of a consistency; you may then reduce it to powder, which is very proper for de-

destroying fungous flesh, and the callosity of the side of certain ulcers

We mix likewise an equal quantity of this powder, ceruse, allum, and turpentine, together, to help to cicatrize wounds, and dry up old ulcers. We likewise make a gargarium of the pure Extract, white wine, and allum, to stop hæmorrhages in the lower part of the mouth. The following is its composition: Put to a quart of white wine two ounces of the Extract of Saturn, an ounce of allum reduced to a very fine powder, and a good half glass of vinegar. I have often found this an admirable astrin-gent; and very proper to stop hæmorrhages proceeding from a remote cause, where there was no possibility of applying compresses, ligatures, or any strong styptic.

F· I· N · I · S.



R E M A R K S

O N T H E

E X T R A C T

O F

L E A D.

By G. ARNAUD, M.D.

And Surgeon, the only person in ENGLAND authorised to sell Mr. GOULARD's original Extract of Saturn, (a) in Church-street, Soho, LONDON.

IT is not my intention here to celebrate the praises of Mr. Goulard's remedy. That is already too well known throughout Europe to want any assistance from my pen. My views coincide entirely with those of the author, in endeavouring to bring it to still greater perfection, by considering it with more precision, both as to its composition and use. To be ignorant of these would be a fault; willingly to conceal its superior virtues, would be an injury to society, and a manner of proceeding very different from the author's, who has published all his knowledge on the subject without reserve.

This medicament, justly looked upon by those of the Faculty, who are free from prejudice, as the best and most universal topic in surgery, may very properly be substituted in the place of all others generally prescribed: it will frequently prove efficacious when the rest have failed, and will re-establish Nature, which they had disordered.

I don't pretend to mention this medicine as a new-discovered one: on the contrary, we have received it from antiquity, known by the name of *Acetum Lithargiri*; but by its having been ill made, *mal-a-propos* applied, and prescribed in improper quantities, it was for some

L time

time out of repute ; and without the assistance and the vigilance of one of Mr. Goulard's speculative turn, who has had resolution enough to stem the torrent of opposition, this remedy, like many others, by having been improperly made, and as improperly administered, would have fallen a victim to the empiric. For want of proper vinegar, the basis of this medicine, it frequently deceived the practitioner, who, from not knowing its properties, and the real method of composing it, entirely laid it aside. But it has of late been too minutely considered to be any longer neglected, and is now looked upon, by the impartial part of mankind, to be one of the greatest ornaments of the dispensatories, as well as the most efficacious remedy in surgery. It is then to Mr. Goulard, a skilful surgeon of Montpellier, we owe its revival ; which could never have been effected but by a man of his eminence, and like him exempt from vulgar prejudice, which has hitherto laid to the charge of this salutary remedy, faults, from which the experiments of many famous in their profession are now endeavouring to exculpate it in favour of mankind.

When this Extract is made with natural vinegar, and the strongest which can be procured in the south of France, (where Nature, in favourable years, and in particular cantons, furnishes this vegetable liquor with more virtues than any art of the vinegar-makers can possibly endow it with) it possesses all the dispersing, cooling, and resolving qualities proper for dividing the glutinous, stagnated matter in the obstructed vessels ; it relaxes them when too much contracted, and restores to the solids and fluids the proportion of circulation necessary for preserving the animal œconomy in a state of health. The common vinegars, which owe their strength to armoniac salt, to pepper, and the dung of the feathered kind, can't fail of robbing this Extract of the qualities necessary for its perfection ; as do likewise other factitious vegetable acids, such, for example, as are brewed in England, and in the northern countries, under the appearance of vinegar. The latter, 'tis true, tho' not capable of injuring the constitution, act as stimulators to the stomach ; but this property is not sufficient to perfectly dissolve the lead, or to impregnate these metallic particles with the particular qualities

ties they acquire by the addition of tartar, natural to those vinegars, which are made with the strongest wines *. I shall not here enter upon the bad qualities which may be conveyed to *Lead* by the ingredients made use of in the composition of factitious vinegars, which are brewed according to every one's particular *recipe*. The best argument in favour of the Extract of Saturn made in particular parts of the south of France, and against any other Extract made with common vinegars, is, that the tartar of Languedoc has the preference in chymical processes; some of which are in vain attempted without it. Another argument still more corroborative is, that at Montpellier alone good verdigrease can be procured, on account of the singular property of its vinegar, and for some other concurrent and unknown reasons, which help to dissolve the copper, the basis of the above drug. For the same reason we may be induced to think that the tartarous particles of the wine of that country, being refined by its change into vinegar, may contribute more efficaciously to dissolve the Lead, which experience daily proves. Com-

* Such as are well versed in the art of chymistry know, that natural vinegar contains an essential oil, which entirely dissolves lead, while its acid only divides its parts. Mr. Goulard has discovered that it is the property of some particular vinegars only of the province he lives in, to perfectly dissolve this metal, as they contain more essential oil than the rest; consequently natural vinegars, when adulterated, or factitious ones which receive their power of action from the acrid ingredients only mixed with them, are not only rendered incapable of perfectly dissolving the lead, but likewise communicate an acrid quality to the *Extract*, very different from the cooling and calming one natural to it when made with the best vinegar. The healing quality of *lead* is evident from its happy effects, when applied in its natural state even to ulcerated cancers; how much more efficaciously must it then act, when its saline particles are so far divided as to be capable of being introduced into the smallest vessels, and there circulate with the juices? These they attenuate and divide so as to return into their proper channel; it is very necessary then, that the vinegar, made use of for the dissolution of the lead, should be natural, well-chosen, and by no means factitious. A chymical analysis will easily discover the defects of vinegar; but as every one is not in a situation of making these experiments, its merits may be ascertained by the taste only. Good vinegar, when touched with the tongue, has a pleasing acid taste, and leaves a freshness in the mouth; but when factitious, rather appears to inflame the mouth and throat, which sensation continues for some time.

mon vinegars help only to divide it in part ; some of Languedoc properly chosen dissolve it so thoroughly, that without any sediment it preserves its weight ; a certain proof that it incorporates itself more with this species of vinegar, which no doubt must render its effects more efficacious. It is certainly owing to this that the medicine we speak of possesses a cooling, attenuating, resolving quality, and by no means a repellent one, as has been hinted by certain people. This requires an explanation, which will be easily understood by the meanest capacity, as I shall endeavour to express myself in the plainest terms.

When the lead is divided only, its parts are too gross and ponderous to remain suspended in the vegetable liquid, its vehicle ; this causes it to subside : on shaking the bottle they again incorporate with the liquid, without suffering a diminution of their volume : this volume, by preventing them from penetrating to the vessels thro' the pores of the skin, causes them to remain in the tissue of those parts, and, by stopping up the passages of perspiration, gives rise to what is generally termed repulsion. But, when the metal is so far dissolved as always to remain suspended in the vegetable liquid, its parts are so fine, and so far attenuated, as not to be discernible thro' the most perfect microscope : they then easily penetrate the pores of the skin, follow the course of the perspiratory vessels, and put in motion the inspissated and stagnated fluids, which they again return to the road of circulation. When the metallic particles act thus, the aquatic vehicles, with which they are combined, loosen the skin, which was before in a state of too great tension, whilst the spirituous ones restore to the vessels that elasticity of which they had been deprived. Thus a resolution of the humours is effected by means of transpiration and circulation : but a wise and cautious practitioner must always attend to the progress of the complaint, when either putrefaction or a degree of malignity is apprehended ; and care should be always taken to mix this with digestives for critical discharges, as by abating their heat it will prevent the neighbouring parts from being affected, and secure the patient against a too copious discharge, which frequently attends these cases.

The comparison made between the Extract of Saturn and its salt, commonly called the sugar of lead, will be found unjust, when we consider that the latter is made with vinegars of all sorts of wines ; and that those of Switzerland, which produce the greatest quantity of this sugar, are made of wines very little impregnated with tartar, and that too of an inferior quality. But after all, this very sugar of lead, which is quoted as a proof of the repellent quality to be found in our medicine, is it not made use of by the ablest practitioners, both as an internal and external medicine ? If so, with how much more confidence may we make use of Mr. Goulard's Extract, properly made, in the above circumstances ? A practice of sixty years has sufficiently convinced me of its superiority over the sugar of lead, which I have known fail, when the other has always answered my intentions.

Such as are thus disposed to criticise the most approved remedies won't give themselves time to reflect, that an accidental failure of success might be owing to this Extract not having been properly made in its commencement, or succeeding processes ; to its having been given in too great a quantity, or applied cold, as indeed the author sometimes recommends, with a view only to the temperate climate he writes in : thus have these people been induced, without having any regard for themselves, to confirm the opinion of the vulgar, who generally attribute the death of the patient to the last remedy ; and thus shamefully take advantage of this fallacious argument to cry down the good effects of the Extract of Saturn, and to extol remedies at best uncertain, often fallacious, and which custom alone, the tyrant of the mind, authorises the use of, both against reason and experience. Many examples might be brought to refute what persons, otherwise respectable, have thought proper to advance to the prejudice of this remedy ; but I will refer the reader to many Observations given by the author in his Treatise, and take into consideration here the first paragraph of the Third Formula, on the inefficacy of the poultices generally prescribed.

The proofs I have given of the necessity of procuring the best vinegar, and the rules I shall lay down in the sequel, for the better making and using this Extract, having

been approved of by men of knowledge and rank in this country, ever intent on means to assist the poorer part of mankind, have induced me to procure a quantity of it from the fountain-head itself. I have applied to Mr. Goulard for this purpose, to whom I have likewise communicated my thoughts on the farther improvement and use of this remedy, which I have had the satisfaction to know entirely coincide with his. This concurrence of ideas, which originally sprung from a fifty years acquaintance, having been fellow-students together, have induced me to imitate him on other occasions *, and has been the means of his allowing me to be the sole vender in this country of the Extract he himself makes.

This topic, which, properly speaking, is an universal chirurgical medicine, and easily procured, has this triple advantage over others: First, it costs but little; secondly, it is prepared in an instant; and thirdly, it may easily be conveyed from place to place.

Whoever is provided with it may prevent the bad consequences of bruises, occasioned either by a fall or blow; it prevents an echymosis, or extravasation of blood, the general attendant of fractures and dislocations, till proper assistance can be procured to dress the patient *secundum artem*: in these circumstances it should be made use of in the beginning, as it is a known remedy against inflammations and mortifications, the general consequences of these complaints. I shall not enter into a detail of the other disorders it will relieve, but shall refer the reader to Mr. Goulard's Treatise; I shall only lay down here some few rules for its use, drawn from experience, which have met with Mr. Goulard's approbation, both as to that and its composition.

I. Every one is sufficiently acquainted with the powerful effects of vegetable acids, and particularly those of vinegar, in regard to brass, to deter him from making this Extract in vessels of that metal. No precaution is sufficient to prevent the vinegar from imbibing some of the copper; it is therefore much more adviseable to make use

* See pages 8 and 201 of my Treatise of Disorders of the Urethra and Bladder, sold by P. Elmsly, bookseller in the Strand, in 12mo. the third edition.

of vessels made either of glass, earth, or pewter. I should have been much more uneasy about a gentleman's servant, who had swallowed by chance, the 8th of December last, a certain quantity of the Vegeto-mineral Water, had not I been very sure that the Extract had not been made in a bras kettle. I assured the master, in answer to his letter, that no bad consequence would ensue, but that it would be adviseable to order the patient to drink some warm water.

Copy of Mr. ****'s Letter.

SIR,

ONE of my servants has swallowed, by accident, some of the Vegeto-mineral Water; are there any bad consequences to be apprehended? and what is best to be done? It happened about half an hour ago. I am, &c.

8th December, 1769.

The day after I received the following.

SIR,

I HAVE the pleasure to inform you, that my servant is perfectly well to-day: he felt last night some pains in his stomach, which the warm water removed; but no stiches, no colicks. I am, &c.

9th December, 1769.

II. The external qualities which characterize the true original Extract of Saturn, consist in its colour, its smell, its weight, its consistence, and its taste: its colour is that of ripe Seville orange, its consistence a little sirupy, its smell empy-reumatical or of burnt sugar, its weight a third part more than that of the vinegar; so that a phial, which holds three ounces of vinegar, ought to weigh at least five ounces and two scruples when filled with the Extract; the thickness of this medicine may be as great a defect as its lightness: for, if it weighs more or less than it ought, it cannot but deceive in regard to the proportions made use of, and not answer to the directions given. See p. 220.

III. When bad vinegar has imbibed as much as it can possibly dissolve, the superfluous metallic particles are observed to sink to the bottom of the bottle: such Extract, improperly called so, is but an imperfect division of the

lead, which must be rejected for the reasons mentioned in page 221.

IV. From this mixture of lead and vinegar is produced a Water called by the author *Vegeto-mineral*; and this Water is endowed with excellent virtues, when made use of in lotions, fomentations, injections, and baths, and in the different *Formulæ* described by Mr. Goulard, in his *Cerate*, *Poultries*, *Pomatums*, *Liniments*, *Plaisters*, &c. But the Water of which we are now speaking, ought to be particularly considered in its own natural state, before it is made use of in its vegeto-mineral one. Every species of water is not proper for this use. Rain-water, when purged and filtered, and that of rivers, whose bottoms consist of either sand or gravel, free from mud, are to have the preference, especially after having been purified either by standing some time, or filtering through proper paper: spring and pump water being impregnated with gypsous or selenitous particles, give rise to a new change of the metallic ones of the lead; and thus a white precipitate is formed, which will by no means incorporate with the water. "These effects, says a celebrated chymist *, are owing to a separation of the vitriolic acid of the selenites from the earth to which it was joined, which now mixes with the lead of the Extract of Saturn, and thus forms a vitriol of lead. In that instant the vinegar mixes with the earth of the selenites, and they form together an acetofe-calcareous salt; so that at the same time a new dissolution and a new combination are effected. Thus the medicine is by no means that of the *Vegeto-mineral Water*, but a mixture of vitriol of lead, acetofe salt, and brandy. On this occasion the vitriol of lead seems to descend in form of a white powder, tho' it is in reality a saline matter dissoluble in water; the reason is, that it cannot be dissolved without difficulty, and that there is not a sufficiency of water to dissolve the whole quantity collected: the remainder of the water contains in dissolution a small quantity of this vitriol of lead. In fine, if you add to the precipitate a large quantity of boiling water, the dissolution is perfect; which proves, that this precipitate is a saline substance." From this argument,

founded

founded on natural philosophy, and confirmed by the experiments of all who make use of water not properly purified, may we not conclude, that we have no reason to be surprized that this remedy has sometimes baffled our endeavours? Is it not, on the contrary, a subject of astonishment, that notwithstanding this accidental defect in its composition, it has been so frequently crowned with the greatest success? In fine, the water which dissolves soap the most effectually is to be preferred, tho' it will be proper first to purify it well. When the Extract is thrown into improper water, it whitens it only for a time, and then falls to the bottom, without being able to mix perfectly with it afresh; this water becomes curdled, and like sour milk; and in this state it is by no means to be made use of, as not at all likely to answer our expectations. To this we may ascribe the want of success, which serves to prejudice many against the remedy, and to please others, who are by no means its friends, for want of being better acquainted with it. When proper water cannot be procured, care must be taken to distil others, if opportunity serves. This may be easily done with the common alembic, taking care to throw away some pints of the first distilled, as it is frequently liable to be foul, by the uncleanness of the head of the still: you must likewise take care to leave about a quarter of it in the still, before you have finished your process, to prevent the rising of any of its heterogeneous particles. But in case of necessity, where proper water is not to be had, any kind of water may be used, taking care to boil and filter it thro' paper which is not stiffened, till some of the best water can be procured *.

V. No-

* It is adviseable, that all those who make use of water in common as their drink, would carefully abstain from all that are hard, earthy, and selenitous; which are apt to disorder the stomach, and give rise to stony concretions in the kidneys and other urinary passages, especially if they meet with any slimy matter. The only means of preventing this is by distillation, which will separate, even from the purest water, some heterogeneous substances; but this must be effected in *balneo mariae*, with alembics either of earth or glas, taking care always to throw away the two or three first pints that pass into the receiver, to avoid certain heterogeneous and volatile substances which rise by distillation with the first portions of water. You must likewise finish your operation as soon as two-thirds of your water is distilled.

V: Nothing is a greater consequence in prescriptions, than the ascertaining the just proportion remedies of this kind bear to each other: I think the author has rather neglected this in regard to his. Looking upon it himself as a topical one only, he has been little anxious about the quantities used in lotions, poultices, &c. for common cases; nor is it indeed very material, but when particular cases occur; such as inflammations of the eyes, ears, throat, and of other parts endowed with no less a degree of sensibility. The author seems to have mistaken the quantity of Extract proper for the occasion, see page 201, where he says, "For example, (speaking of the eyes) "put at first ten or twelve drops of it (Extract of Saturn) "to a common glass of water, and increase them gradually, as the inflammation is seen to disperse"—and after, "against the defluxions of the tympanum of the ear "and occasional deafness, taking care in these cases to "add to the drops of the Extract double the number of "drops of camphorated brandy, though common brandy "may be used, as for ophthalmies."

The indefinite measure of a glass of water gives here an equivocal sense. It is always improper to prescribe a remedy by measure, when it is to be used with circumspection. Nothing can be ascertained by *a glass of water, a coffee-spoonful, or drops.* These measures contain more or less, according to the different places they are used in; and drops may vary according to the consistence of the Extract. As all measures then vary, and even in the same country, care must be taken, where it is possible, to make use of weights, and to reduce foreign ones to those of the country we live in. The author himself has followed the weights and measures of the country he inhabits; I will follow the English one called *Troy**, as it has

distilled, because what remains in the still must be impregnated more or less with noxious particles, which the water might imbibe, was you to continue your process any longer. The water thus distilled must be put into bottles well washed, and rinsed with the above distilled water. These bottles must be stopped with a glass stopple. If the water has been well distilled, it will preserve its limpidity, after you have poured into it some drops of the solution of mercury by spirit of nitre. This experiment must be made upon a small quantity of the distilled water.

* Called in French *Poids de marc*, or silversmith's weight. The same is used in Paris.

has more affinity to the Montpellier weight, being divided, like that, into ounces, drachms, scruples, and grains. The Troy pound, indeed, contains only twelve ounces, and the Montpellier sixteen ; but in the ounce there is only a difference of seven grains and an half, the *Troy* ounce being so much heavier than the Montpellier. In the drachm the difference is less than a grain, in the scruple not a third of one. The grain differs more in proportion, as the Montpellier scruple is divided into twenty-four grains, and the *Troy* scruple into only twenty; but for the satisfaction of those who may be curious to know the exact difference between the English and Montpellier weights, I have added a Table, in which is expressed the value of the Montpellier pound, half pound, ounce, drachm, and grains, both in *Troy* and *Avoir-du-Pois* weight, as likewise the several values of these sorts of weights, compared with the Montpellier, and with each other ; and this I imagine will be the more welcome, as most of the authors who treat of the comparison of English and French weights, are more likely to mislead than to inform their readers. I cannot help remarking here, that the origin of different weights arose from the ancient custom of regulating them by that of a barley corn, which served as a standard for all the rest, by multiplying them into carats, scruples, drachms, ounces, pounds, &c. but as it necessarily happened, that the barley corns made use of in different countries, weighed more or less on account of their size, moisture, or dryness, it gave rise to the difference of weights ; and made it difficult to ascertain precisely those of different countries. It is much to be wished that the different powers of Europe would come to a general regulation of weights ; it would be a change of much greater importance to trade, than that of the old stile, which all nations have not adopted ; though there are none who would not find their account in having a general or universal standard for measure and weight.

But let us now return to the method of prescribing the Extract of Saturn, and again resume our subject, from which this episode has somewhat hurried me. I shall then make use of the weight, generally known by the name of *Troy-weight*. The proper and generally prescribed quantity

tity of Extract to a bottle of pure water (*a*) is one penny weight (*b*) if the Extract is well made, which quantity will make about forty drops (*c.*) Now, if we suppose the bottle to weigh twenty-nine *Troy* onnces, and a glass of water to weigh about three ounces, the quantity of Extract, according to the proportion given by Mr. Goulard, would exceed, or at least be equal to that of the Vegeto-mineral Water prescribed by him for common uses; when, on the contrary, the quantity ought to be diminished considerably. So that I would recommend, in inflammations of the eyes, to put only two drops of the Extract to every three ounces of water, and the same proportion to be observed in all cases where the sensibility of the part is equally delicate, especially since Mr. Goulard has brought his Extract to so great a degree of perfection as to weigh two third parts more than when his book was written (*d.*)

The method of counting the drops is to have a cork bored from end to end, through which passes a tube about the size of a small quill, commonly called a pinion; this quill must be cut off at both ends, like the obtuse end of a tooth-pick; and of the two extremities of the tube thus cut, one enters into the bottle, and the other remains on the outside of the cork. By inclining the bottle downwards, and putting the end of the fore-finger upon the aperture of the tube, you may let the drops fall at pleasure, one after the other.

Mr. Goulard does not recommend his Pomatum in ophthalmies, and I think with great reason; greasy and oleaginous substances are always dangerous in inflammations of the eyes and erisipelatous complaints, though they are equally adviseable for those of the ears: he ought to have recommended the frequent washing the eyes externally with the Vegeto-mineral Water, and keeping a compress constantly on them, well wetted with that water. This I have constantly practised with success; but you must be careful always to add some brandy, and even that which is camphorated. This omission, on the part of the author, in his first prescription, gives an air of obscurity to the last part of his second paragraph, by putting you in mind there of the necessity of making use of brandy in the

a This ought to weigh 29 or 30 ounces. *b* The 24th part of an ounce. *c* See our bill of directions, note †, p. 4. *d* See the bill of directions, p. 3.

second prescription, as well as in the first; a circumstance he has entirely omitted. Let it be remarked, that camphorated brandy on all occasions is to be preferred to the non-camphorated, as I shall endeavour to prove in the following article.

VI. It is my opinion, that in the cases in which the author recommends the use of camphire, one of the most antiphlogistic and antispasmodic medicines in physic or surgery, he does not prescribe it in large quantities enough. Camphire is one of those medicines we use too sparingly, not being sufficiently conversant in its effects, which are always wonderful, whether made use of externally or internally. I would recommend a work of Mr. Pouteau, intitled, *Mélanges de Chirurgie*, which would convince any one of the good qualities of this drug. I know an English gentleman, who not only preserves himself from, but cures himself of many complaints by the use of camphire, of which he takes inwardly a large quantity; and always carries about him a box of it. When I make use of this with the Extract of Saturn, it is in large quantities, and with some precautions, different from those of Mr. Gouillard. If it is given in small quantities, it has no effect; when mixed with pomatum, cerates, liniments, it is obliged to undergo the heat of fire, by which means the volatile parts of it are evaporated; what remains of them insensibly passes away, so that in a few days none is left. Whenever the Vegeto-mineral Water is made use of, I would recommend the same quantity of camphorated brandy as the author prescribes of that which is not camphorated. This camphorated brandy should be kept in a bottle well corked; you must be careful likewise to fill it up now and then, and see that the camphire you make use of for this purpose is not too dry, but that it is fresh, oily, and of a strong perfume.

VII. Mr. Gouillard recommends the Vegeto-mineral Water to be warmed only during the winter, and to make use of it in summer in its natural state. This distinction may be a very just one at Montpellier, and in other warm climates; but in England, and other cold countries, it is absolutely necessary always to warm it, otherwise the metallic particles are not so thoroughly divided; and by the Water's being impregnated with the vegetable parts only, the repelling property, with which it is reproached, only remains,

remains. The same may be said of all cold waters ; they act as repellents, by causing too great a contraction in the fibres they ought to relax, and the colder they are the greater is their repelling power ; but when warmed, they are of a moistening, relaxing, softening, and resolving quality. But particular care must be taken not to exceed the dose above prescribed in inflammatory cases. Mr. Cosmond, a celebrated surgeon, has well observed, that the leaden particles, when introduced into the vessels in too large a quantity, irritate and force them so considerably, as frequently to add to the complaint, instead of relieving it. This is a fault that many, who are ignorant of the effects of this remedy, frequently fall into ; and often blame the medicine, when themselves are only in fault.

In cases where the lymph only is affected, the same precaution is not necessary, as a drachm or two of Extract more may be safely added to each bottle of water.

VIII. Such as are little versed in the knowledge of the medical virtues of metals, are very apt to make cosmetic pomatum with the Vegeto-mineral Water. These have followed the errors handed down to us by our ancestors, who have made use of lead under various forms ; others have made use of magisteries of pewter and bismuth, &c. which have rather served to destroy the beauty of the skin, than to preserve it : the reason is evident ; these metals, by insinuating themselves into the pores, there depose some of their particles the most divided, and by first opening and then filling up these pores, spoil the finest features.

These metallic particles become of a black dye, and plainly shew a leaden colour, which can be concealed only from the eye, by the application of white wash composed of the same drug, which by plastering over the surface of the skin, add to this deformity. The author of these Remarks begs leave to caution the fair sex from trusting to these pomatum, the composition of which is a secret, the better to conceal the known poison they are fraught with, which for a short time appears to answer their intentions, only to give the deeper wounds afterwards. Time only can re-establish nature, and the use of the pomatum described by the author in his Treatise on Ruptures, p. 138, by leaving out the gold and the saffron ; the first making the skin black, the

the other yellow. This pomatum, without altering the skin, softens and nourishes it, preserves its transparency, destroys tetter and redness, fills up wrinkles, and repairs all damages done to it, either by the use of other pomatums or paint. This pomatum is infinitely superior to that of Saturn, or the cerate for removing the piles, for the scalding of the skin, and to remove the spots which remain after the small-pox, if applied to it some time after the eruption.

IX. The efficacy of this remedy against external disorders incident to animals, having been by Mr. Goulard, and by the celebrated Mr. Blunt, in his learned practical Farriery, left unnoticed, Dr. Arnaud has thought it a duty incumbent upon him, to point out his notions upon such disorders of horses, as are similar to those of men; such as, strains, bruises, blows, inflammation of the eyes, &c. Several of the nobility having adopted the Doctor's opinion, directed the use of the Extract to some farriers, who, astonished at its surprising effects, introduced it immediately into their private practice. Their often repeated experiments were so much the more successful, as they used the Genuine Extract of Saturn. This medicament was soon known, and as soon extended into general use amongst farriers; but by employing the spurious sort, they often, to the destruction of the horse, and the discredit of so valuable a remedy entirely miscarried, or retarded the cure. To avoid such inconveniences, Dr. Arnaud continues to sell the true Extract at ten shillings and sixpence a Vial, at his house in Church-street, St. Ann's, Soho; where may be had, Mr. Goulard's Vegeto-mineral Water, ready prepared for horses; and made with distilled Water, true French spirit of wine, and the finest camphire, at four shillings a quart. Goulard's pomatum, at ten shillings and sixpence a gallipot; and eye-water at four shillings a Vial, all calculated for horses, with proper directions for the application of each.

C O P Y

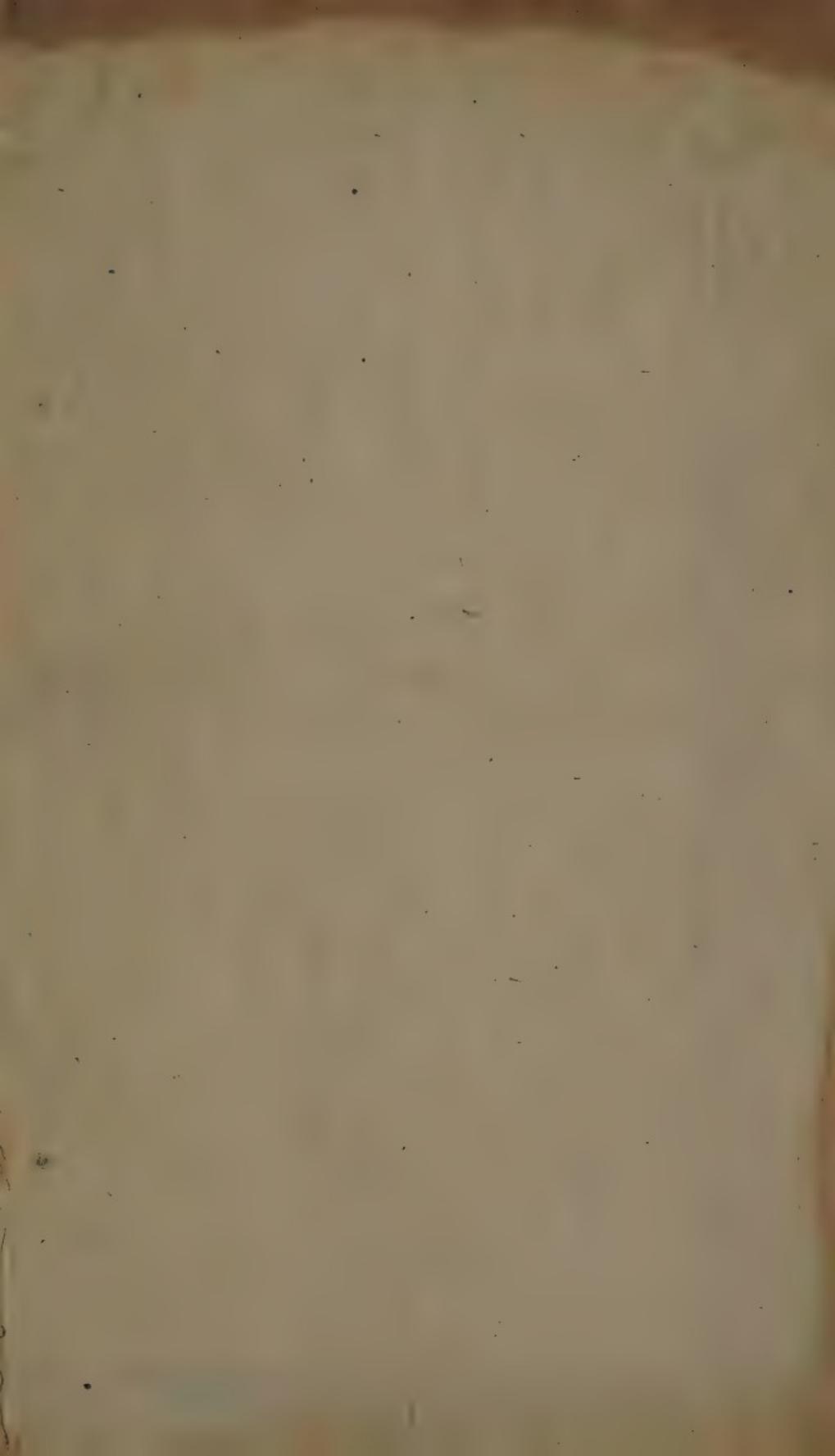
Of the POWER granted to DR. ARNAUD, in Church Street, St. Ann's, Soho, AUTHOR of these REMARKS, to provide the PUBLIC with the original EXTRACT of LEAD.

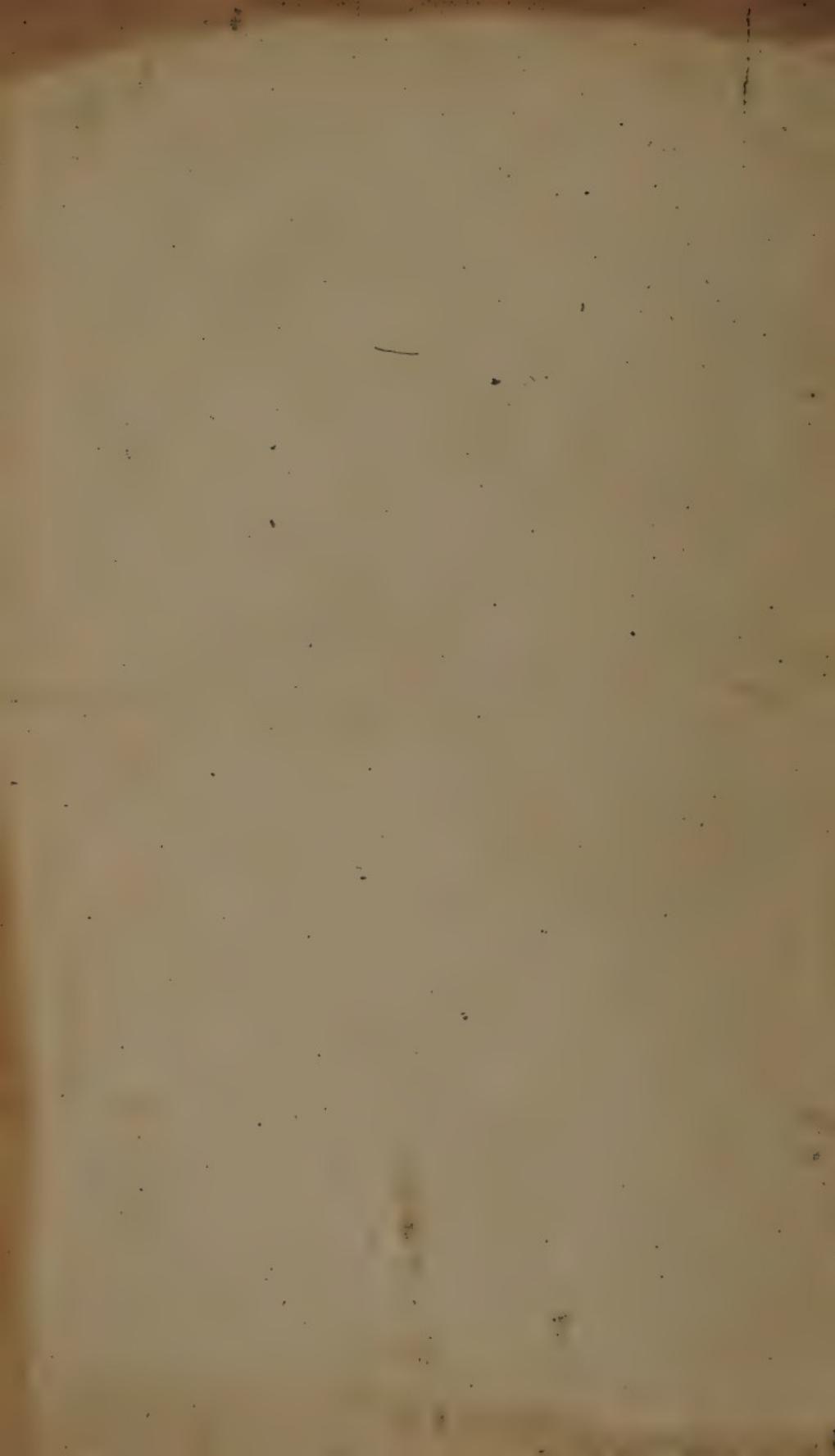
I The under-writer, counsellor to the KING, and perpetual MAYOR of the town of ALET ; lecturer and demonstrator royal in surgery ; demonstrator royal of anatomy in the College of Physicians ; fellow of the Royal Academies of Sciences in MONTPELLIER, TOULOUSE, LION, NANCY ; pensioner of the KING, and of the province of LANGUEDOC for lithotomy ; and late surgeon to the Royal and Military Hospital in MONTPELLIER ; do hereby certify, That in consequence of the friendship which has subsisted these fifty years past between Mr. GEORGE ARNAUD, my fellow-student, and myself, I do pass my word by this present, and engage myself to supply the said Mr. G. ARNAUD, doctor in physic in the university of TUBINGUEN, ancient member of the Royal Academy of Surgery, lecturer and professor of anatomy in the College of Surgeons at PARIS, and in LONDON as one of the corporation of surgeons of that city ; to supply, I say, the said Mr. G. ARNAUD, and him only in ENGLAND, with a sufficient quantity of my Extract of Saturn made by myself, in the best manner I am able, in order to be distributed by him, or those commissioned by him, over all the dominions of his BRITANNICK MAJESTY ; promising besides to supply with the same no other in ENGLAND, as long as he shall continue to sell that I have sent him, or shall continue to send him ; to confirm which I do put here my hand and seal this day, being the 2d of March, 1770.

GOULARD.

F I N I S.







Salt

MEDICINE-

Ther.

24826.

Tractatus Medicus de Sale ejusdemq. in Corpore
resolutionibus salutaribus et noxiis Omnibus Medicinae
Practicis valde utilis et Aegrotis necessarius.

With inter. frontisp. & A's portr.

KOZAK, Joh. Sophron.

Evo.

Frankfurt....

1663.

GOUARD



